AUSTRALIAN

Flying

australianflying.com.au

creational | Sport

MICHAEL SMITH
Southern Sun

AVALON AIRSHOW WRAP UP

UNSUNG HEROES

A day in the life of an aerial spotter

Seaplane voyage around Australia

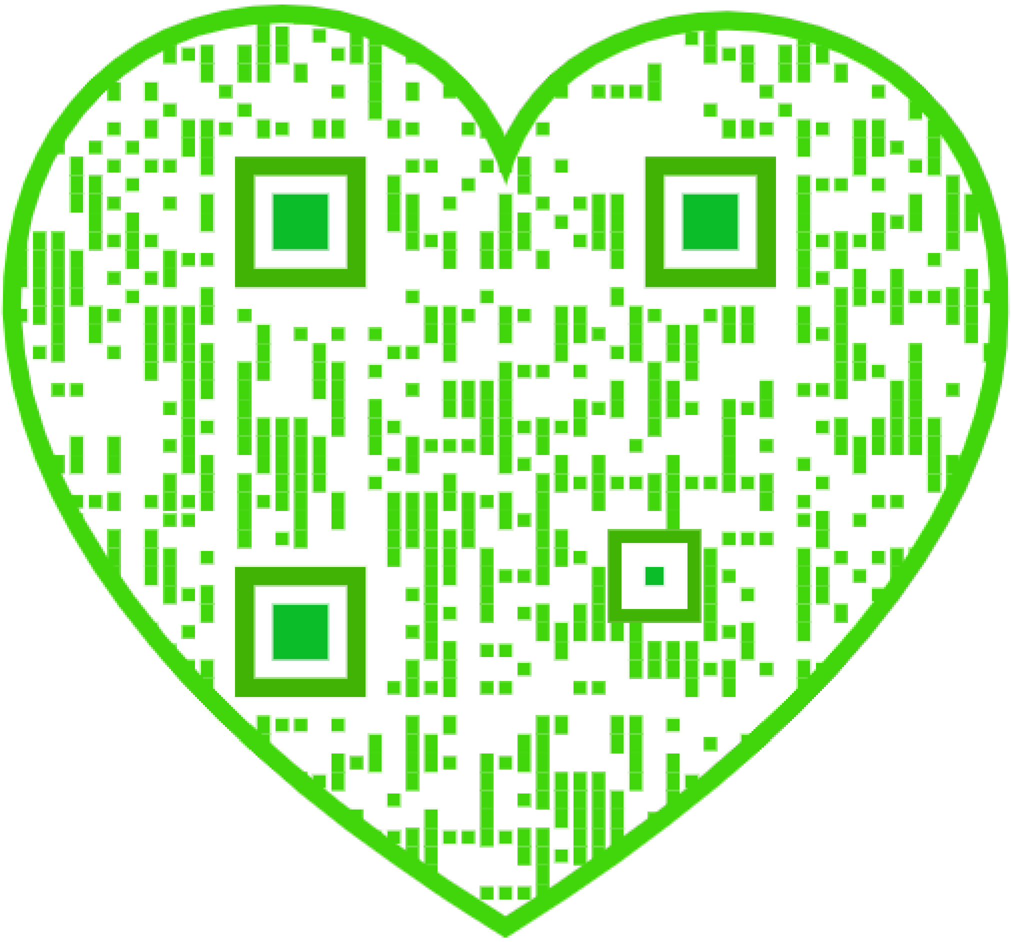
JIM DAVIS

The skill that saves lives

Should the ATSB investigate RAAus accidents?

MAY-JUNE 2025

100 1925 - 2025 yaffa



PHENOM 300E
EMBRAER

PHENOM® 300E
BY EMBRAER

Phenom 300 series

WORLD'S BEST-SELLING LIGHT JET FOR 12 CONSECUTIVE YEARS

and the most flown business jet in the U.S.

Best-in-class speed, range and cabin pressurization.

+1 321 751 5050 | embraer.com/phenom300e

Features

12 Making a Splash

2024 marked the 100th anniversary since the very first flight around Australia. In April and May, **Michael Smith** undertook a splendid adventure retracing that journey.

18 From Combat to Commuter

Paul Southwick takes a deep dive into buying and flying ex-military aircraft.

24 Private Investigations

Controversy is rife over why the ATSB constantly demurs when it comes to investigating accidents in recreational aircraft. **Steve Hitchen** investigates.

30 Unsung Heroes

The term "aerial spotting" conjures up images of military balloons, or two-seat biplanes in WWI, or Cessna Bird Dogs in Vietnam. **Paul Southwick** explores aerial spotting in the modern day.

36 Avalon Wrap-up

Steve Hitchen rounds up a week at the Avalon Airshow.

42 What Lurks Beneath

Wire strikes are on the increase. An analysis of key statistics for the past decade shows that, in 2022, wire strikes were 80% above the average number per year. **Robert Cassidy** investigates.

48 Free from the Bonds of the Earth

Over 9 days in January, the NSW Group of the Australian Air League held its annual summer flying camp at their Air Activities Centre located at Camden Airport. **Brian Grinter** reports.

Regulars

Editorial	06
News	08
Fit to Fly	50
Industry Interview	52
Lessons from a Logbook	54
Reader Opinion	58
Rotors	60
Beyond Visual Reference	62
Reports from the Regions	64
Flying Training	66
Safety Matters	68
Down to Business	70
What Can We Learn	72
Short Final	74

AUSTRALIAN
Flying
AVALON AIRSHOW WRAP UP
australianflying.com.au
UNSUNG HEROES
A day in the life of an aerial spotter
Seaplane voyage around Australia
JIM DAVIS
The skill that saves lives
Should the ATSB investigate RAAus accidents?

Cover: Michael Smith with his Sea Bear before his circumnavigation of Australia

G5 AI

GSB 15

G5 DG/HSI

GMA 245 AUDIO PANEL

GTR 205x TRANSCEIVER

GTX 355 TRANSPONDER

GNC 215 NAV/COM

GNC 355 GPS/COM

GPS 175 NAVIGATOR

PANEL MOUNT AVIONICS

GARMIN experimental avionics support a wide range of panel mount avionics. FLIGHT STORE can help you create a system that perfectly fits your panel, your priorities, and your price range.

GARMIN®

AUTHORIZED DEALER

FLIGHTSTORE

REAL PILOTS SHOP AT **FLIGHTSTORE.COM.AU**

07 5536 8694

Kreisha Ballantyne ponders when it's time to stop flying.

The Final Full Stop

I'm writing this on JQ608 on departure from Avalon. My aversion to large, sweaty crowds allows me to tap out of the Avalon International Airshow on Friday afternoon and the departure lounge was filled with similar introverts scurrying home after the 4 trade days.

What I love most about Avalon, and airshows in general, is bumping into pilots I haven't seen for years. This show, I met a flying minister whose church supports his work by owning a C182, which he flies to his rural congregation. I met an old pal who flew in from Darwin in a flock of seaplanes and numerous colleagues, past instructors and readers of this publication.

> « The study revealed that pilots will downplay their medical symptoms for fear of losing their medical. »

And I met not one, but two, pilots who stopped and made me think.

The first is an older gentleman who'd had a career in the airlines. Upon retiring, he bought himself a twin and regularly flew IFR. Asking him about his recent flying, he told me he'd packed up his headset for the last time. "I'm 82. It's time to stop," he told me. "How did you know it was time?" I asked. "I could feel myself slipping. The odd forgetful moment here, where I'd realise I hadn't changed frequency; I started having difficulty reading the charts' small print." Most importantly, he told me he'd stopped enjoying flying. The stress was outweighing the joy. I applauded his self-awareness and acknowledgement of his limitations.

The second pilot I met was a decade and a half younger and had just sold his aircraft, a C182. He was on the other side of an acrimonious divorce and had started suffering mild bouts of anxiety. He had made the decision to only fly VFR. "Flying IFR and staying safe is about remaining current," he told me. "But more than that, it's about flying regularly. Currency is not the same as regularity and I was finding that I just wasn't flying enough, after I sold my business, to retain my confidence." The feeling of anxiety he experienced led his DAME to prescribe fluoxetine, and after a period of grounding to check the effects of the medication, he was able to fly again. He found a local flying school, re-trained on a smaller, lighter aircraft and now only flies locally.

I was thinking about both pilots when I attended CASA's seminar on mental health. Dr Kate Manderson shared a story that really stuck with me: recent research had uncovered that pilots hesitate for an average of 11 minutes before calling an ambulance, compared to those who don't fly. The study revealed that pilots will downplay their medical symptoms for fear of losing their medical.

The seminar also revealed that over 50% of pilots don't declare all their health issues or concerns to their DAME. Mental health issues, subject to societal stigma, are least likely to be mentioned.

The purpose of the presentation was to ensure pilots that AvMed isn't an ogre waiting under the bridge to snatch away your medical (an accompanying slide showed that fewer than 4% of Class 2 medicals are knocked back, in cases of pilots not suffering from significant illnesses). Rather, they are making an attempt to create a more collaborative environment around mental health. Which, as a pilot who self-grounded when I hit a 'rocky patch', is heartening to hear.

The take-home message is that self-awareness around our own personal health is the key to safety. By listening to our bodies, as well as our health professionals, we (largely) get to decide when we fly our final full-stop.

Kreisha Ballantyne – Editor

AUSTRALIAN Flying

Editor: Kreisha Ballantyne
kreishaballantyne@yaffa.com.au
Editor-at-Large: Steve Hitchen
Senior Contributor: Paul Southwick

ADVERTISING
National Sales Manager:
Andrew Murphy, 17-21 Bellevue Street,
Surry Hills, NSW 2010.
Tel: (02) 9213 8272,
andrewmurphy@yaffa.com.au
Advertising Production:
John Viskovich

SUBSCRIPTIONS
WWW.GREATMAGAZINES.COM.AU
CALL 1800 807 760
SUBSCRIPTIONS@YAFFA.COM.AU
Subscription Rates
1 year – 6 issues $51.00
1 year PLUS (print + digital) $57.00

AUSTRALIAN FLYING
is published by Yaffa Media Pty Ltd
ABN 54 002 699 354
17-21 Bellevue Street,
Surry Hills NSW 2010.
Ph: (02) 9281 2333

All Mail to:
GPO Box 606, Sydney, NSW 2001.

100 yaffa 1925 - 2025

Publisher: James Ostinga
Production Director: Matthew Gunn
Marketing Manager: Lucy Yaffa
Studio Manager: Lauren Esdaile
Designer: Bree Normoyle

All contributions should be sent to the Editor on the above e-mail address.

Images should be supplied with a separate list of captions and the creator's name for each image. Please note that digital images MUST BE SUPPLIED AT A RESOLUTION OF AT LEAST 300DPI AT 15 CM ON THE LONG SIDE.

Most editorial queries should be answered within a month; if not contact the editor.

ISSN 0004-9123

Australian Government
Civil Aviation Safety Authority

Your safety is in your hands.

Pledge your commitment to aviation safety today and join a network of individuals and organisations committed to the actions that keep our skies safe.

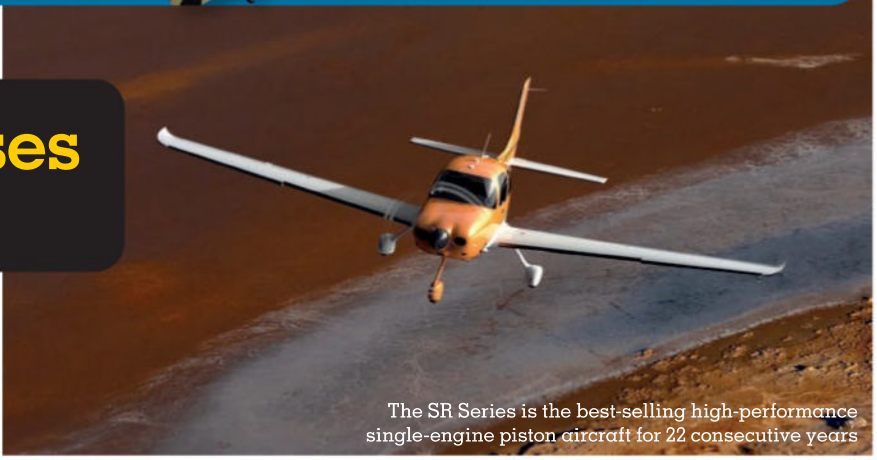
Take the *Aviation safety pledge*.

Safety is a shared responsibility. Visit the CASA website to find out what it means, and why it matters.

casa.gov.au/pledge

News

Cirrus Re-releases the Australis



The SR Series is the best-selling high-performance single-engine piston aircraft for 22 consecutive years

IMAGE: CIRRUS AIRCRAFT

Cirrus Aircraft Ltd has revealed the 2025 SR Series G7 Australis® Edition aircraft.

This third release of the Australis Edition is thoughtfully designed and configured for the climate and remote flight operations that Australian pilots regularly experience.

“We are excited to bring the 2025 Australis Edition aircraft to Australian pilots,” said Zean Nielsen, CEO of Cirrus. “The 2025 Australis aircraft builds on design cues from previous editions and is updated to include all the SR Series G7 features. Our proven SR Series offers peace of mind while traveling long distances between Australian airports with enhanced safety systems such as the Cirrus Airframe Parachute System® (CAPS®)."

The SR Series is the best-selling high-performance single-engine piston aircraft for 22 consecutive years, with 18 million total flight hours across the worldwide fleet. The SR Series G7 delivered the most comprehensive interior redesign to date and introduced Perspective Touch+ avionics to reduce pilot workload and increase situational awareness.

Australis Edition Features

Like previous editions, the 2025 Australis Edition continues to be tailored for the needs of Australian pilots. The Cirrus Airframe Parachute System® (CAPS®), air conditioning and UV protected windows are paired with accompanying SR Series G7 upgrades including dual touchscreen controllers, 14” highresolution displays and stick shakers.

The Australis Edition also features an extensive list of accessories including All-Weather Floor Liners with Australis badging, sunshades, a Garmin® inReach Mini and premium aviation subscriptions.

Australis Edition Aesthetics

The aircraft features a premium interior with bolstered leather seats and Australis accents throughout. An exclusive two-tone exterior boasts the most accent color available on any SR Series aircraft. The updated topographical design on the tail and Australis badging ensures recognition on the ramp. ‘

Learn more about the 2025 SR Series G7 Australis Edition at cirrusaircraft.com/au/australis

Inaugural Wings Award Ceremony at Avalon

CASA chair Mark Binskin presented the 2024 CASA Wings Awards to the winners in a ceremony at Avalon 2025.

The Wings Awards recognise the contributions to general aviation of individuals and organisations in five categories. The presentation last week was the first time in the history of the awards that all presentations were done in one single ceremony.

The event was mc’d by *Australian Flying* Editor, Kreisha Ballantyne and introduced by AMDA Chair, Adrianne Flemming.

The presentation ceremony took on added prestige after being moved from the advertised GA Pavilion to the AMDA Foundation Chairman's Suite.

Present to accept their awards, citations and prizes were:

- Cameron Marchant – Col Pay Award for a Lifetime of Service to General Aviation
- Royal Aero Club of New South Wales – Aero Club of the Year, represented by Lachlan Hyde
- Jeremy Miller – Flying Instructor of the Year
- Georgie Arnold – Young Achiever of the Year
- Flight Training Organisation of the Year, Panair from Bathurst, was unable to attend, but instead responded via a pre-recorded video from the USA, with Avalon commentator Angela Stevenson accepting the trophy on their behalf.

“I was in awe of the talent of both the established and emerging members of our community,” said Kreisha Ballantyne. “Each year, the recipients are a blend of highly established aviation professionals and dedicated young pilots making their mark in GA. It’s awe-inspiring to see our future movers and shakers mix with our experienced leaders.”

Presented by the Australian Division of the Royal Aeronautical Society and Australian Flying, and sponsored by CASA, the 2024 Wings Awards were supported by Garmin, Bose, David Clark and World Fuel, all of which provided prizes to the winners.

GARMIN.

NOTHING ELSE EVEN STACKS UP

PILOT
SPKR
TEL
ICS ISOLATION
CREW
USB PWR
COPILOT
GARMIN
DIS
26.0 NM
Menu
GS
134 KT
Back
TERM
TO
DTK
TRK
023°
023°
COM
118.20
APPROACH+
STBY
122.80
KSHN UNI
KSEA
EMDEN
LOFAL
MARNR
MAP
TERR NRST
Psh COM
MON
Find COM
COM
RX
SO
118.500
KOSH
TOWER
STBY
MON
125.900
KOSH
ATIS+
ISO
MENU
FUNC
CRSR
ON
SBY
ALT
IDNT
ALT
1200
BLUETOOTH
ON
CLR
ENT

Choose the next-generation capabilities you'll find nowhere else with a practical yet highly capable GPS 175 navigator, GNC® 355 GPS/COMM or GNX™ 375 GPS/transponder — and get convenient installation, a full warranty and industry-leading support that will keep you flying for years.

GARMIN.COM/NAVIGATORS

© Garmin Ltd. or its subsidiaries. All rights reserved.

Avalon 2025 sets New Trade Days Record

After fears that this year's Australian International Airshow would not measure up to the post-COVID euphoria of Avalon 2023, AMDA Foundation announced yesterday that the trade day attendance had eclipsed the last show by more than 10,000 people.

The result took the attendance for the three industry-only days to 60,000, which is also 20,000 more than the 2019 air show.

It was a result that pleased Justin Giddings, CEO of Avalon Australian International Airshow organiser AMDA Foundation.

"Avalon 2025 was all about engagement between industry, defence, the aviation and aerospace community and the general public," Giddings said.

"Feedback from our exhibitors and air force is that once again the airshow achieved this with flying colours, including the largest industry presence we have ever had at the event."

Avalon 2025 featured more than 350 aircraft in the air and on the ground, including 45 aerial display aircraft and 64 on ground display.

Whilst celebrating the post-show result, AMDA Foundation took a moment to acknowledge the aircraft accident during the public airshow on Friday, when Paul Bennet Airshows pilot Glenn Collins collided with the ground during a four-ship aerobatic sequence.

"Aviation is a tight knit community, and an incident like this affects us all," Giddings said. "Our thoughts are with Paul Bennet Airshows pilot Glenn Collins, his family and his team during this difficult time.

"The Paul Bennet Airshows team are all highly skilled professionals who have participated in our airshows for many years, always with a focus on delivering an exciting but safe performance. We look forward to welcoming the team at future events."

Giddings also hailed the success of the AMDA Foundation STEM program, which saw more than 7000 secondary and tertiary students participating in a program which included hearing from former NASA astronaut and Shuttle Commander Mike Bloomfield, and Australia's first Australian-flagged astronaut, Katherine Bennell-Pegg.

"In aviation and aerospace we are always trying to attract the next generation of innovators, and one of the great experiences of this event was seeing thousands of students learning about how aviation and aerospace can offer exciting and rewarding careers," Giddings said.

"We look forward to returning in 2027, to again deliver one of the world's great air shows, for industry and the Australian public."

Among the numbers that defined Avalon 2025 are:

- over 200,000 attendances over the six days of the event
- over 60,000 attendances during the trade days
- more than 7000 Careers Days students in attendance
- 350 aircraft displayed in the air or on the ground
- 902 participating exhibitor organisations from 28 nations
- 291 Delegations from 43 countries
- 65 conferences, symposiums and presentations.

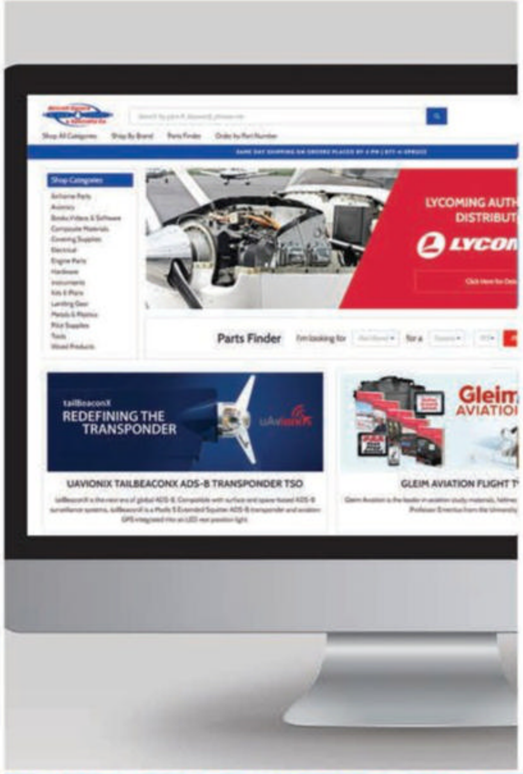
Avalon 2025 was held from 25-30 March this year, much later than normal due to the rescheduled date for the Australian Formula One Grand Prix in Melbourne.

DEAKIN UNIVERSITY
DEAKIN DEFENCE
▸PROVEN◂

ABOVE: Attendance for the three industry-only days was 60,000, which is also 20,000 more than the 2019 air show.

Aircraft Spruce & Specialty Co. SINCE 1965

AIRCRAFT SPRUCE AUSTRALIA
Everything for Planes & Pilots


LYCOMING AUTH DISTRIBUT
Parts Finder
REDEFINING THE TRANSPONDER
UAVIONIX TAILBEACONX ADS-B TRANSPONDER TSO
GLEIM AVIATION FLIGHT T

Aircraft Spruce SINCE 1965 & Specialty Co.

AVIATION'S BEST WEBSITE • SAME DAY SHIPPING • 10,000,000+ PARTS IN STOCK

ACK TECHNOLOGIES INC. · AEROLEDS A WHELEN AEROSPACE COMPANY · AEROSHELL · aerox · APPAREO · APS "Black Steel" Brakes · ARTEX · asa · BendixKing · BOSE · CHAMPION AEROSPACE · CIES · Comant · CONCORDE AIRCRAFT BATTERIES ...the heart of your aircraft · CONTINENTAL AEROSPACE TECHNOLOGIES · Curtis SUPERIOR VALVE CO INCORPORATED · David Clark COMPANY INCORPORATED · DYNON · EASTMAN · EATON · Electronics International Inc. · GARMIN · Gill Powered by TELEDYNE · GOODYEAR AVIATION · H3R AVIATION · HARTZELL AVIATION BUILT ON HONOR · HUTCHINSON · ICOM · JPI J.P. INSTRUMENTS · LP AERO PLASTICS INC. · LIGHTSPEED · LOOS & CO. CABLEWARE DIVISION · LORD · LYCOMING · McFarlane · MICHELIN · MidContinent INSTRUMENTS+AVIONICS · MYGOFLIGHT · PHILLIPS 66 The Most Trusted Wings In Aviation · Plane-Power · POWERUP AIRCRAFT IGNITION SYSTEMS · PS ENGINEERING INCORPORATED Sound Quality. Sound Engineering. · RAPCO, inc. REPLACEMENT AIRCRAFT PARTS CO. · rc allen instruments · SPECIALTY TIRES OF AMERICA, INC. · START PAC · Superflite · SUPERIOR AIR PARTS · TEMPEST · TRUE BLUE POWER · uAvionix · WAT AEROSPACE TECHNOLOGIES · WELDON PUMP · YAESU

ORDER YOUR FREE
2024-2025 CATALOG!
1000 PAGES OF PRODUCTS!

Aircraft Spruce is pleased to announce that our newest branch is now open for business in Melbourne, Australia. We are bringing our 60 years of parts distribution experience and industry-best customer support system directly to the local Australian aviation market. We thank our Australia and New Zealand customers that have supported us from our USA facilities for decades and we look forward to your next order!

www.aircraftspruce.com.au
Call Toll Free (1800) 953522

CELEBRATING 60 YEARS IN AVIATION 1965-2025

Making a Splash

2024 marked the 100th anniversary since the very first flight around Australia. In April and May, **Michael Smith** undertook a splendid adventure retracing that journey, but a niggling concern lingered for the rest of the year: what about Tassie?

The original flight omitted Tasmania, so I did as well. However, I'd received calls from ABC radio, and people had even written letters asking: what about Tassie?

So, I set myself a goal, before the year is out I would fly solo non-stop around Tasmania in one day. It would take around 11-12 hours, so I aimed for around summer time for longer days. The plan was: follow the beach at 500', anti-clockwise, so the same simple navigation system deployed on the round Australia flight applied here: if the beach is out the left window, you're going the right way.

The original flight

The 1924 flight captured the attention of the nation, splashed across front pages of newspapers and followed by families in their sitting rooms around the wireless. Officers Goble and McIntyre (G&M) of the RAAF had been tasked to undertake the mission, following the shoreline all the way. They chose to take a Fairey Mk iii Seaplane as there simply weren't enough runways built around the coast to take a conventional land aeroplane. This entailed vast logistics; fuel drums were delivered to nearly 50 rivers, lakes and beaches around the country over several months.

In reading about the original 44-day flight, it became clear what an incredible achievement it was at the time. There were many delays and the planned month became six weeks.

I would follow their route and dates as closely as possible, making some changes due to the passage of time, modern practicalities and even for personal satisfaction. I would embark again in Southern Sun, a twin engine amphibian. The plan was:

- follow same dates and towns of 44 days
- wait the same amount of days as the original flight in cases where they became stuck
- touch down on the water where the original flight did, but then head to the closest local airport for fuel and parking the plane overnight.
- hug the beach all the way around Australia, at the height of 500', to be able to see the coast in its entirety
- where G&M flew directly across the top of the Gulf of Carpentaria, I would follow that coast all the way around.

Cleared for take-off

Officers Goble and McIntyre set off from the shore of Point Cook on the 6th April. Point Cook base was once both a land and water-based airfield, with a large boat ramp and jetty for seaplane operations. Initially, G&M made great progress, making it to Eden for refuelling then onto Rose Bay on Sydney Harbour for their first night's stop.

I set off on a late morning in April after a nice send off from the RAAF and a small gathering of family and friends, with plenty of time and daylight to get through to Rose Bay.

Our first stop after following the rugged coast all the way around Wilsons Prom was for a water landing on Corner Inlet, where G&M had put down to repair a leaking fuel tank. After

MAIN: Day 20 approaching Darwin from the East

RIGHT: Have Espresso machine, will travel

IMAGES: MICHAEL SMITH

a "splash'n'dash" (as opposed a "touch'n'go") I looked east along the coast to see quite a bit of low cloud and scud rain rolling through, so I made a diversion to Yarram airfield to sit out the weather. The visibility was not good for flying, yet I could do something not possible 100 years earlier: I opened my iPad and studied the radar display of weather moving through. This has been one of the greatest safety advances of our time and would be used many times throughout the trip.

After a couple of hours, it looked like the weather had passed, so I departed again, tracking east along the 90 mile beach. Only half an hour later it became clear that there was still more low cloud ahead, so I diverted to Bairnsdale for the night and had to accept that on day one I was already behind! I was disappointed, but safety first!

The next morning, a blue enough sky welcomed me back to the airfield and I was able to continue on. Passing Eden for a splash'n'dash (SnD) where G&M refuelled, I tracked onto Rose Bay for a never-gets-old 500' flight over Sydney Harbour, the bridge, the Opera House and a SnD at Rose Bay. It was still early enough that I could continue on to the Myall River and be back on track by the end of the day.

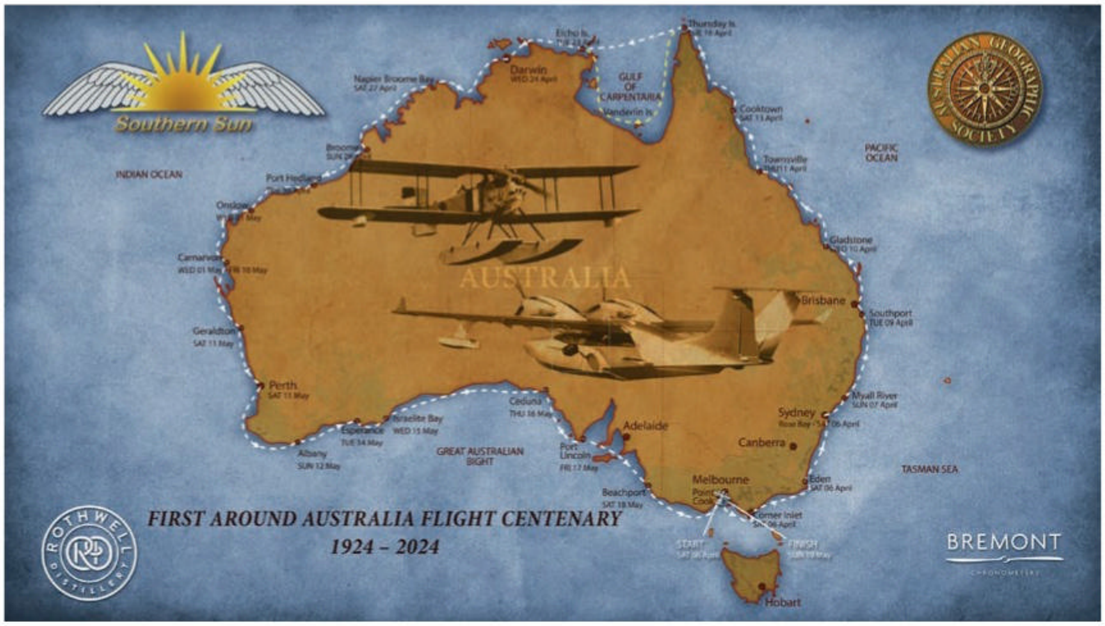
Goble and McIntyre had left Rose Bay at lunch time, having waited the morning for rain to clear. However, once heading north along the coast they encountered more weather and could not get more than 100' above the water without entering cloud. After a couple of hours flying north of Newcastle they relented and headed into Port Stevens looking for shelter and put down on the Myall River and ended up staying the night.

I had wanted to do the same but was unable as the river had a 4 knot speed limit. However, close by was the Myall Lakes, that flowed into the river, without a speed limit. I alighted here for the night, tied up to the shore, cooked a flathead on an open fire and slept in the plane. It was a splendid evening, and finally reset my mind from manic departure mode into adventure mode. It was day two and I was now in the groove; this was one of my favourite nights of the whole trip.

Flanked by Growlers

Things progressed well up the coast, with stops in Southport and Gladstone, with clear weather and no delays. The arrival into Townsville needs special mention. A couple of weeks before starting the trip I was contacted by RAAF 6th Squadron to confirm that they would also commemorate the

IMAGE: MICHAEL CURRIE


Southern Sun
INDIAN OCEAN
PACIFIC OCEAN
TASMAN SEA
GULF OF CARPENTARIA
GREAT AUSTRALIAN BIGHT
AUSTRALIA
Thursday Is.
Elcho Is.
Darwin
WED 24 April
Napier Broome Bay
SAT 27 April
Vanderlin Is.
Cooktown
SAT 13 April
Townsville
THU 11 April
Broome
Port Hedland
Onslow
Carnarvon
Geraldton
SAT 11 May
Perth
SAT 11 May
Albany
SUN 12 May
Esperance
TUE 14 May
Israelite Bay
WED 15 May
Ceduna
THU 16 May
Port Lincoln
FRI 17 May
Adelaide
Beachport
SAT 18 May
Melbourne
Point Cook
START
FINISH
Corner Inlet
Eden
SAT 06 April
Canberra
Sydney
Myall River
SUN 07 April
Southport
TUE 09 April
Brisbane
Gladstone
WED 10 April
Hobart
AUSTRALIAN GEOGRAPHIC SOCIETY
FIRST AROUND AUSTRALIA FLIGHT CENTENARY
1924 – 2024
ROTHWELL DISTILLERY
BREMONT
CHRONOMETERS

ABOVE: Day 41 Alighting Ceduna, SA

RIGHT: RAAF Ensign carried on journey and now in Pt Cook Museum.

BELOW: Michael's centenary flight route mirrored the original 1924 flight.

OPPOSITE The author's beloved aircraft, the Southern Sun, a twin-engine amphibian.

centenary with a circumnavigation by a pair of EA18 Growler aircraft, which they would do over 7 days. The RAAF would time their departure to rendezvous with me in the air over Townsville, with a plan to park together overnight at the air base. Well, that turned out to be one of the most exciting moments and fun days of my life, with me flying along the Townsville foreshore at max speed of 135 knots while they flew past either side of me as slowly as they could. Not something many private pilots will ever get to experience!

The top end

I was looking forward to Cape York, the most northern point of Australia, where G&M spent 7 days on Thursday Island due weather and maintenance.

Rather than wait there the whole 7 days, on the 4th day I ventured south along the coast to follow the whole shoreline of the Gulf of Carpentaria over a few days. The incredibly desolate yet striking coastline with very few buildings or settlements was seen over a few days (and 1000 miles of coast), before arriving into the large city of Darwin. After a few nights in Darwin the next two days were the most anticipated of the whole trip: seeing the Kimberley for the first time.

The further from Darwin, the full allure of the Kimberley was revealed; the awe-inspiring beauty that has made it one of the worlds most desirable bucket list destinations laid out before me. The Horizontal Falls, my single most anticipated destination, did not disappoint and I was fortunate that, at the time of my arrival, I was the only aircraft in the area so had complete access to fly over and around the falls to explore. Gob smacking indeed.

Arriving into Broome on a complete high, I was greeted warmly by the ground crew and air traffic controllers. The Horizontal Falls air tour operators even put Southern Sun up in their hangar for my stay. I had two nights here,

which let me catch up with some other seaplane pilots, led by David Geers, on a clockwise flight around Australia.

A grinding halt

I continued along the coast, where everything was about to come to a grinding halt.

When Goble and McIntryre arrived onto Carnarvon foreshore, they found themselves marooned on a sandbank with the tide going out. Local yacht club members arrived by launch to offer a drink and some help. On trying to depart the next day, they were unable to attain full power on the engine. The engineer tried to remedy the problem but was unable to do so. This was the beginning of a 10-day delay in Carnarvon a hundred years ago, and for me a break, a chance to explore, with Southern Sun kindly put to bed in the Coral Coast Helicopters Hangar.

Luckily there was a spare Rolls Royce engine in Perth just in case it was needed, and was dispatched. Today it is a 10-hour drive from Perth on a sealed highway, but back then it took 7 days, starting with a train then a lorry on a difficult track. Once the engine arrived, it was exchanged and tested successfully in only 1 day; all the more amazing as there was no crane in town and they were working in the shallow water on the beach where the plane was resting.

On 11th May 1924, day 36, Goble and McIntrye recommenced their journey southbound, as did Southern Sun in 2024. With a brief splash in Geraldton, they went on to Perth, where they alighted on the Swan River at 4.15pm for an overnight stop.

I was excited to land on the Swan River, at Elizabeth Quay, parallel to Langley Park just south of the CBD, a spectacular location. I was determined to land 100 years later to the minute, and with the help of ATC and a few minutes of orbits overhead I successfully splashed down right on 4.15pm. Huzzah!

The west coast

When Goble and McIntyre stopped on the barely protected waters of Israelite Bay, in the Great Australian Bight, they landed at the Telegraph Station. Today, that building is abandoned, the roof and other features long removed by the passage of time and weather. But striking ruins remain, with no one in sight. I was able to land on a sandy strip besides a dried lake and spend the night, the only person there, sleeping in the plane. A long walk around the area, to the beach and through the ruins finishing with clear skies and carpet of stars, it was both surreal yet splendid.

The longest flight of the trip was next, across the Bight to Ceduna. There was simply no where suitable for water landings across this famously rugged coastline.

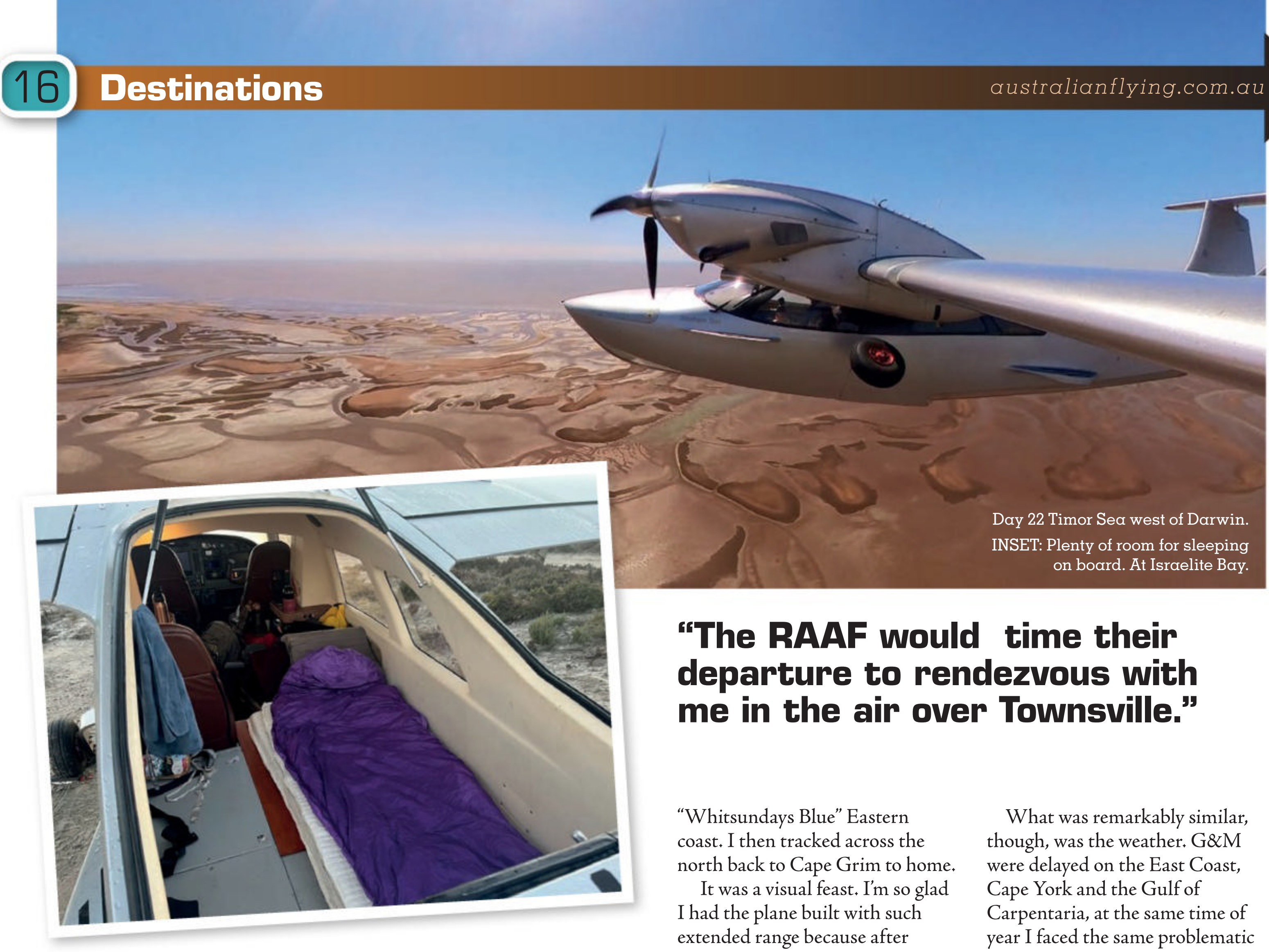
avplan efb
plan smarter, fly sooner

Take your flight planning to new heights with AvPlan EFB, the premier lifetime Electronic Flight Bag App that grows with you as a pilot.

- Comprehensive flight planning & moving-map navigation
- Interactive Graphical Area Forecasts, plain-English TAFs & METARs
- Highly accurate 4-D wind modelling
- Easy NAIPS flight plan filing
- Longitudinal & Lateral Weight and Balance (iOS only)
- For all pilots, at all levels
- Outstanding support and customer service
- **30 day free trial**

Download on the App Store
GET IT ON Google Play

ph 03 8370 3024 • www.avplan-efb.com



Day 22 Timor Sea west of Darwin.
INSET: Plenty of room for sleeping on board. At Israelite Bay.

“The RAAF would time their departure to rendezvous with me in the air over Townsville.”

I thought a lot about the several people who have kayaked around Australia; this would be one tough stretch to conquer. One of the most spectacular of flying days, the cliffs are mostly 200’ to 300’ high and flying over the water at 500’, provided an incredible view back at the cliffs. I could at times see the Nullarbor Highway and people camping by the cliffs edge.

One fun side diversion was to top up for fuel at the Nullarbor Roadhouse, a classic outback diner and fuel station. By landing behind the building then taxing around onto the road, I was able to pull up at the petrol bowser between the cars, caravan and trucks; one of the great things about flying in rural Australia. I certainly gave the tourists driving through something fun and unusual to see.

With only two days to go, a mixed sense of relief of nearly being home, sadness that it’s nearly over, yet trepidation that anything could still go wrong, kept me alert.

Sunday the 19th May, day 44 was the final leg. On return to RAAF Pt Cook, I was greeted by the RAAF brass band and fire trucks forming an arch with their water cannons for me taxi through on arrival. The RAAF Ensign I carried was presented and now displayed in the museum. Splendid.

What about Tassie?

The flight around Tassie, several months later, was on a perfect New Years Eve of mid 20’s, blue skies and fair winds.

I flew from Rothwell direct across the ditch to Cape Grim on NW Tasmania. I had several hours of coastal flying; the desolate West coast, the brutal (for mariners) south coast, around Hobart waters then up the sandy “Whitsundays Blue” Eastern coast. I then tracked across the north back to Cape Grim to home.

It was a visual feast. I’m so glad I had the plane built with such extended range because after 10.8 hours of flying I landed with 3 hours of fuel. The Tassie lap finished the year off nicely.

The ease of modern life

Once I dry land, I began reflecting on the original flight and what has changed in 100 years. Without doubt, planes are more reliable and convenient today. Back then, an engineer was needed to constantly attend to the engine and pilots navigated with a compass, speedo and watch. Today, GPS reduces workload and stress levels.

While G&M spent hours fuelling the plane, transferring tins, wading through the water for the 400 litres needed, today hundreds of airports around the country have fuel bowsers. They didn’t have a radio and could go days without being in touch; today we have aviation radio, satellite tracking, ADS-b, internet and mobile phones.

What was remarkably similar, though, was the weather. G&M were delayed on the East Coast, Cape York and the Gulf of Carpentaria, at the same time of year I faced the same problematic weather. 100 years later in autumn, low cloud and heavy rain still is a challenge for small planes.

In 1924, G&M found the locals would help them refuel, beach the aircraft or lift it off when the tide went out, often be fed and bedded. Similarly, people were often keen to offer a lift, a bed or a BBQ for locals interested in the flight and to chat. Especially in the regions, hospitality and helpfulness is alive and well.

For most of the journey, I did not see buildings let alone cities; the vastness of the uninhabited Australia prevailed and it really sunk in that for the majority of this country, 100 years is but a blip in time, for nothing much has changed over 10,000 years.

Michael Smith was named Adventurer of the Year by Australian Geographic for his 2015 solo circumnavigation of the world in his Searey, More at: www.southernsun.voyage or YouTube: SouthernSunTV

SKYLANE

A LEGENDARY AVIATION ICON REMASTERED

Experience newly updated instrument panels, sleeker and more modern interiors, enhanced technology and stunning new exterior options. Feel the passion for flying.

Take flight at **cessna.com/next-level**

SKYLANE

© 2025 Textron Aviation Inc. All rights reserved. Cessna® and Design and Skylane® are trademarks or service marks of Textron Aviation Inc. or an affiliate and may be registered in the United States or other jurisdictions.

Cessna

BY TEXTRON AVIATION

From Combat to Commuter

Paul Southwick takes a deep dive into buying and flying ex-military aircraft.

General aviation (GA) pilots often have a fascination with military aircraft. If you're keen to see them up close, you can volunteer at a museum, or join a warbird association. Knowing the owner, paying a fee, or just being in the right place at the right time you might score a ride or flight in one. If you want to part with a big sum of money, you could be lucky enough to own and regularly fly your own ex air force, navy, or army aircraft.

The Planes of Fame Air Museum in Chino, CA, has a collection of 160 aircraft with more than 35 in flyable condition. Its website sums up the reasons for operating ex-military airplanes as follows: to preserve rare and historic aircraft; to inspire people to the enticing field of aviation; to educate and tell important stories from aviation's rich history; and to honour aviation pioneers and veterans.

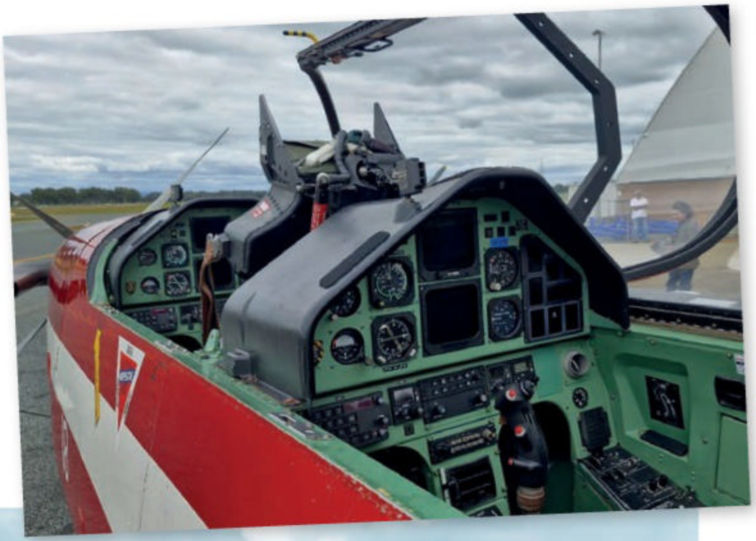
Ex RAAF Pilatus PC-9

Having spent a day with the Royal Australian Air Force (RAAF), including an hour flying the PC-21 (*Australian Flying*, Sep-Oct 24), I was delighted to be invited to fly (from Wangaratta - YWGT) one of the RAAF's recently retired

INSET: One big surprise for those taking a seat in the Tiger is just how snug the cockpit is.

MAIN IMAGE: The engine spins of the Tiger the other way to a modern trainers, so rudder is input in the opposite direction on take-off.

IMAGES: PAUL SOUTHWICK



TOP: The ejector seats have been removed, due to the high cost of maintaining them and the requirement for an engineer to accompany deployments.

ABOVE: The PC-9 has a reliable and uncomplicated [1,149 hp, PT6] engine and two seats in tandem.

OPPOSITE: Finding instructors qualified and experienced with the PC-7 can be difficult

PC-9s, owned and assembled by of Arthur Allan Aero and based in Albury, NSW.

Owned by Allan Arthur and Margot Smith, the company has completed numerous warbird projects, including the restoration of a CAC Boomerang and P-40 Kittyhawk, and the purchase of 21 Hawker Hunters from the Singapore Air Force. Doug is an experienced display pilot, having flown the Boomerang, P-40 Kittyhawk, P-51 Mustang, Spitfire, A37, Hudson Bomber and T-6 Harvard. Margot, who is also a pilot's father, Elvie Smith, was on the team which designed the Pratt & Whitney PT-6 engine. He became the chief executive officer and president of Pratt & Whitney Canada. Sons, Jack and Harry are also pilots.

Says Allan, " We saw the PC-9s come up for sale and simply thought, why not? It's an historic aircraft. We initially thought we'd like two, but then said it's just as easy to put three or four together, and sell all but one of them. We've always had a soft spot for ex-military aircraft, and we were also able to acquire a significant number of ex-RAAF spares." This was significant, as it relieved a legitimate concern regarding post purchase access to spares, at a reasonable price.

"For US$1.2 million a buyer will get P51 Mustang performance, for less than a third of the cost. The docile landing and circuit speeds are comparable to many GA aircraft. Downwind speed is 140 kts, reduced to 120 kts in the base turn. Take-off flap reduces the speed to 110 kts, and on final, landing flap reduces the final approach speed to 85 kts over the threshold."

"The PC-9 has a reliable and uncomplicated [1,149 hp, PT6] engine and two seats in tandem. Someone can buy it to fly themselves around. Or if they want to enjoy the aircraft as a passenger, hire a pilot."

"We're surprised how economical the engine is. We recently did a flight for over half an hour, climbing, and descending from 7,000 feet, and doing all sorts of aerobatics, to find we'd used just 200 litres of Jet A1."

The instructor for my flight in the PC-9 was Steve "Boris" Becker, an ex-RAAF Squadron Leader, former member of the Roulettes display team, and dux of the US Navy test pilot school [respect!], where he flew multiple aircraft including the MIG-15 and Lockheed U-2.

My first question about the red and white aircraft, formerly A23-018, but now VH-ZYK was, "does it still have ejector seats?" The answer was no, due to the high cost of maintaining them and the requirement for an engineer to accompany deployments. I was fitted with a flight suit, for fire protection, helmet, and asked to sign a legal waiver.

We then did a detailed safety briefing including control handover procedures, key speeds (rotate, best glide and final approach) and radio use. After a short lunch we strapped in (me in the back, with great visibility). Most controls, like the centre stick, and the instruments were in the same place as the PC-21. The panel was about half electronic and half round gauge, with no GPS.

Boris fired up the PT6 and we taxied out for the 1,640 m long runway 36. The release of power on the roll was immediate and immense. We were soon gear up, on upwind, at 500 AGL, before Boris commenced a rapid "military grade" steep turn to the left, and when clear of the circuit, accelerated into a vertical climb through a gap in the clouds. On top there was too narrow a gap before the next cloud layer, and so it was a near vertical dive back down to 3500 ft, for a quick roll or two, before Boris handed me control.

It was great to manoeuvre the aircraft around at 250 kts over the cloud-covered hills and around the grass strip which is Porepunkah airfield (YPOK). I revelled in the visibility, speed, acceleration and smooth performance. It was then back to YWGT where Boris flew a military buzz and break before handing over to me to again, to fly the pattern down to short final for runway 18. I was amazed at the feeling of incredible strength and reserves of power of the PC-9; its "rail like" stability in all configurations and easy to operate engine.

The PC-9 is indeed an easy-to-fly, fun military aircraft. Reflecting the ease of operation, it was suggested that training for an "average" civilian pilot might be three to five flights, depending upon experience and attitude, as this is an aircraft with enormous aerobatic and performance capabilities. Insurers will surely have a say on pilot qualifications, experience, currency and training.

Ex RAAF Tiger Moth

The Royal Aero Club of WA (RACWA) has operated two bright yellow, 1940s, fabric covered, tail wheel, Tiger Moth bi-planes, on popular joy flights over the Perth city skyline, and aerobatic experiences, for years.

Says Head of Operations, Jarod Rowe, one of six RACWA pilots qualified to fly it, "The engine spins the other way to a modern trainers, so rudder is input in the opposite direction on take-off. A very thorough preflight brief is required, first as communication in an open cockpit is more difficult, secondly to ensure the passenger is properly strapped in (and won't fall out during aerobatics), and thirdly, to ensure the sick bag location is known, as if the passenger vomits, it blows back in the pilot's face!"

"Although the landings at 60 kts are quite docile, the Tiger has a limited cross wind capability, which deserves a lot of respect. Even when the wind is straight down the runway, the turn off is cross wind. You aren't finished flying a Tiger until the aircraft is shut down and tied down."

On the positive side Rowe says, "the open cockpit, at a true airspeed of 90 knots, is exhilarating and unlike other flying. However with a strong headwind, you can be passed by cars on the highway. It's fair weather only, with attention paid to avoid rain, which at that speed, feels like getting stuck in the face with tiny pins."

One big surprise for those taking a seat in the Tiger is just how snug the cockpit is. You tend to wear it, not sit in it.

"One big surprise for those taking a seat in the Tiger is just how snug the cockpit is. You tend to wear it, not sit in it."

Rob Dicey's Pilatus PC-7

When returning from a flight at Jandakot (YPJT), I spotted a bright red PC-9 or PC-21 lookalike aircraft. On enquiry it turned out to be a Pilatus PC-7, privately owned by businessman, Rob Dicey.

Dicey's love for aviation began during his time with the Air Training Corps, when he had a ride in a PC-9. He says, "Flying isn't just a hobby; it's a way to connect with a deep-seated passion for precision, adventure, and exploration. I use the PC-7 not just for recreation - it's a highly functional tool that makes my business and personal commitments achievable, allowing me to travel across vast distances quickly, saving time that can be better spent on what truly matters, whether it's family, work, or community involvement." Dicey also uses the PC-7 for aerobatic displays, which he finds mentally and physically challenging, as well as rewarding.

Dicey purchased the aircraft from Germany, but its history makes it special. It served in the Botswanan Air Force and was meticulously maintained by Pilatus, which was a significant factor in his decision to purchase. After Pilatus bought the aircraft back from the Botswanan Air Force, they used it for testing the PC-21, and for flight simulation research. He chose the PC-7 because it is well supported by Pilatus and is a fully registered civilian aircraft, giving him confidence in its reliability and legality for private use.

Dicey flew the PC-7 back to Perth from Germany. He says its performance and economy are outstanding—it burns only 200 lbs of fuel per hour (114 lph) at flight level 200, with a TAS of 220 knots.

For others interested in aircraft ownership Dicey says, "Understand your needs; choose an aircraft that aligns with your goals, whether it's for business travel, recreational flying, or aerobatics, and think about what you'll use it for most, to ensure it meets those needs. Do your research and look into the aircraft's history, maintenance records, and manufacturer support. A well-maintained aircraft, like my PC-7, is a must for peace of mind and reliability."

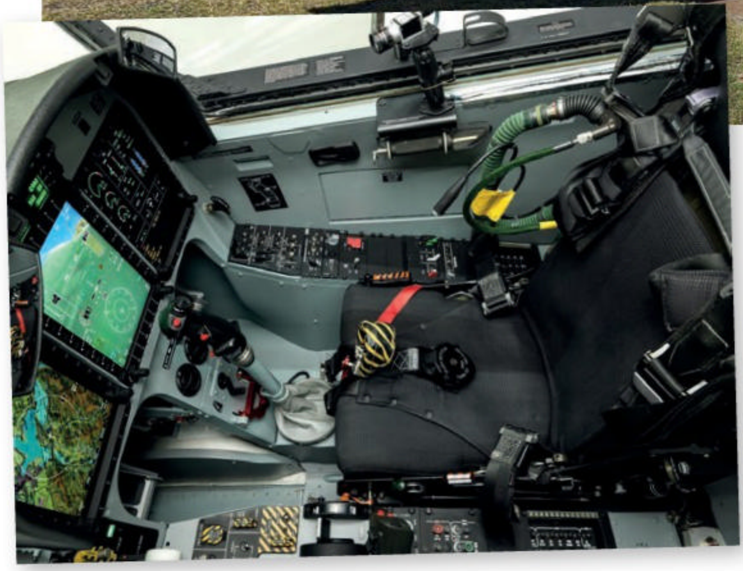
"In terms of training, take the time to build your skills, especially if you plan to do aerobatics or long-distance trips. Confidence in your abilities as a pilot makes all the difference."

"Plan for ongoing costs. While I don't see any major cons in owning the PC-7, aircraft ownership comes with ongoing expenses like maintenance, fuel, and hangarage. Being prepared for these costs helps you enjoy the experience without the stress."

Dicey says, "The pros of the Pilatus PC-7 include versatility - the PC-7 is equally suited for training, travel, and aerobatics; it's a do-it-all aircraft that doesn't compromise on performance or economy; reliability; and support by Pilatus; ease of maintenance - the schedule is straightforward, and finding a good maintenance company makes the process seamless. Applied Aviation in Jandakot, for instance, has been exceptional in ensuring everything runs smoothly."

He also likes the personal growth, whether it's through aerobatic challenges or the focus

THIS IMAGE: The PC-7 dwarfs the author



INSET: Full cockpits, including large Garmin G500s, with Garmin GI275 back up instruments, and a GTN650Xi.

required for long-haul flights; the PC-7 opportunities to grow as a pilot; emotional escape - flying provides a unique mental reset, combining adventure with tranquillity; nostalgia and pride - the PC-7 carries a rich history and heritage, making it more than just a plane - it's a piece of aviation excellence; and again the Pilatus support with contracts in place for both air force and civilian operations through to 2040. This ensures parts, service, and expertise are available for decades to come, making it a dependable choice for the long term.

In terms of minor cons, Dicey says, "Arranging insurance for the PC-7 can be a challenge. With limited examples in Australia, insurance companies often struggle to understand its unique profile, making the process more complex; and finding instructors qualified and experienced with the PC-7 can be difficult, given the specialised nature of the aircraft. However, this challenge can be overcome with the right networks and preparation."

Flying Rottnest Island

It's a big machine, not fully appreciated until you stand next to it, dwarfed. As soon as I entered the rear cockpit of the tandem seat PC-7, I could tell it was a unique, highly specified version, with both pilots getting full cockpits, including large Garmin G500s, with Garmin GI275 back up instruments and a GTN650Xi. There were five point harnesses, the familiar throttle quadrant, gear lever and flaps on the left, and radios, like the PC-21 and PC-9. You fly with your right hand on the stick. Like the demilitarised PC-9, there were no ejector seats.

Impressive were the immaculate exterior and interior, and powered, single canopy, that slides open and closed with the push of a button, unlike the side hinged canopies on the PC-9 and PC-21. There was fantastic visibility in all directions, from both seats. Up front there was a 650shp PT6 derated to 550shp - great for short take offs and landings. The undercarriage is retractable.

With my headset on, Dicey started the turbine, and as for the whole flight the PC-7 was noticeably smooth and quiet. Our plan was a VFR flight from Jandakot, with the Freemantle Golf Course departure (FREM), for a flight around Rottnest Island ("Rotto"), which lies less than 10nm off the coast, and back to terra firma for a run down the beaches back to Jandakot, via a Powerhouse entry.

Acceleration off runway 24R was smooth and fast. It quickly put us high above RACWA to the right. We made a turn for Freemantle, and immediately amazing views of the city, Swan River, white sandy beaches, Indian Ocean, and Rottnest Island, famous for its cute quokkas, came into view. Perth International was too busy to clear us for a city orbit, so we set course for Rottnest. There is definitely something reassuring about the hum of a turbine over a stretch of water, where sharks abound.

There were other fixed wing and rotary aircraft in the area that required constant external scans, with frequent traffic call outs coming from Perth Centre. Dicey handed over to me as we sped westward at between 500 and 1,000 feet, making 200 kts. Turbine powered aircraft are highly addictive, for good reason.

Dicey set the heading bug south and at 200 kts I commenced a 2G turn, aware of the greater distance required to change direction. We followed the coast, past bathers on popular Cottesloe Beach, the Fremantle docks (made famous in the 1980s for the America's Cup), Powerhouse and Adventure World. As we approached the later, I most reluctantly handed control back to Dicey. We were cleared to join downwind for 24R. The PC-7 was easy to handle at both high and low speed, and Dicey flew a perfect approach and landing, pulling up with beta, in a few hundred metres.

This short flight showed me why Dicey loves the PC-7 so much, and why it has probably doubled in value since he bought it. VH-IMI seemed to blend all that is best about a military trainer and civilian aircraft - that is, tough, but with great handling; easy and fun to fly; fast, relatively economical and enormously satisfying to take command of. Dicey also owns a 310hp Air Trainer – but that's another story.

TECNAM P2012 STOL

CERTIFIED & AVAILABLE FOR ORDER NOW

Making accessible the world's most extreme airports
with unprecedented comfort, safety and style

CONTACT US TODAY

Michael Loccisano
0418 555 662 | michael@hallmarc.com.au

hallmarcaviation.com.au
Level 14, 257 Collins Street, Melbourne

TECNAM QUALITY AIRCRAFT SINCE 1948

Hallmarc AVIATION

IMAGES: AUSTRALIAN TRANSPORT SAFETY BUREAU

Private Investigations

Controversy is rife in the general aviation community over why the ATSB constantly demurs when it comes to investigating accidents in recreational aircraft. **Steve Hitchen** does some investigating to determine the root causes of the problem.

MAIN IMAGE: ATSB investigators at the crash of an A32 Vixxen near Tumut. In this case, the aircraft was VH-registered.

LEFT: GA airwork accidents are near the top of the ATSB priority list, which is why investigators were on site at this crash in Sutton, NSW.

Both the Civil Aviation Safety Authority (CASA) and the investigative Australian Transport Safety Bureau (ATSB) firmly believe that learning from aircraft accidents and incidents leads to an increase in aviation safety.

The ATSB finds out what went wrong, then makes recommendations which CASA adopts to prevent it happening again. It's like learning from other people's mistakes before you make them yourself.

But the ATSB has courted controversy and criticism from several quarters because they don't investigate accidents involving aircraft registered with self-administering bodies like RAAus and the Gliding Federation of Australia. If we learn from accidents, why are we ignoring the lessons to be learnt from these sectors?

RAAus could, and for years did, conduct their own investigations. But without the indemnity guaranteed by the Transport Safety Investigation Act of 2003, they are exposed to litigation for their findings. So instead, they leave investigations to the police and state coroners; people not specifically trained in air crash investigation.

As a state of affairs it is well left of satisfactory, but simply demanding the ATSB investigate all RAAus crashes may not be the answer.

Status quo

When RAAus gets the news of a fatal accident, they ask the ATSB if it warrants an investigation and are generally rebuffed. Responsibility then falls to the state police and the coroner to decide the cause of death and make recommendations.

Most times, the police will assign detectives to the case, who will call in aviation experts, including RAAus and the ATSB, to plug holes in the knowledge base. Once all the evidence is compiled, the file is handed over to the coroner, who will determine the cause of death, taking into account the opinions of the detectives and forensic experts.

After an inquiry, the coroner will hand their findings and recommendations to various stakeholders. However, there is no compulsion to make those findings public, nor for RAAus, CASA or any other stakeholder to act on the recommendations.

"Police and coroner's findings are often not made publicly available, and RAAus requests that they be shared with members," RAAus CEO Maxine Milera told *Australian Flying*. "However, this is typically at the discretion of the next-of-kin. When findings are made public, they can lack the detail and safety recommendations of an ATSB investigation.

"Whilst there is no legal obligation to adopt recommendations from a coroner's inquiry, any recommendations will be seriously considered."

Even though they take a lighter-touch regulation policy toward recreational aviation, CASA may get involved in a coronial inquiry if called upon, and they track all recommendations. Even if they are not a stakeholder in the case, they still call up all coroner's reports and it is believed they have never been refused one. But as Milera points out, sometimes the coroner's inquests are not as thorough or practical enough to add to the aviation safety debate.

In fact, there is nothing to force a coroner to make any recommendations at all, further watering down the impact an investigation can have on safety.

"An ATSB report includes Safety Issues and Actions," explains Dr Tony Stanton, Consultant Director of Strategic Air and former senior manager at CASA. "These are a summary of the safety issues identified during the investigation and details of what safety action has been taken or is recommended by the ATSB.

"CASA has a Safety Systems team that monitors when these recommendations are made, tables them for consideration by the CASA Executive, and reports internally on their implementation (or not).

"CASA is not obliged to implement any ATSB recommendation."

IMAGE: AUSTRALIAN TRANSPORT SAFETY BUREAU

IMAGE: AUSTRALIAN TRANSPORT SAFETY BUREAU

LEFT: Air crash investigations can be costly, especially if hull recovery is needed.

BELOW: ATSB investigators co-ordinate with QLD police on the Gold Coast

OPPOSITE: As this chart shows, sport and recreational accidents are trending down.

CASA routinely accepts and implements most ATSB recommendations, but on occasions the regulator and the investigator will not agree, and recommendations have been set aside.

That's for VH-registered accidents. CASA monitors RAAus accidents, but without full ATSB investigations, lessons are not being identified with the same probity.

Why not the ATSB?

Over 13,000 aviation accidents/ incidents are reported to the ATSB every year. That's a tonne of work every year for one agency. Needless to say, not every report carries the same urgency, with the ATSB triaging each one to select those they will and will not investigate.

"In line with long-established government policy, the ATSB has always been required to put our finite resources into investigations that are going to have the greatest public benefit," ATSB Chief Commissioner Angus Mitchell explains. "So we have to be very clear about what is going to be the greatest public benefit.

"At the top of the list is commercial passenger-carrying operations – RPT. Then comes smaller commercial operations like charter, commercial operations like agriculture and freight, VH-registered private aircraft accidents and serious incidents, and below that, recreational flying like ballooning, RAAus, gliding, those operations that fall under self-administration.

"So it's not that sport and recreational aviation accidents aren't in the list of priorities, but they are right down the bottom."

Like most federal agencies, the ATSB is beholden to a minister and department through a document called a *Statement of Expectations* (SoE). This letter directs an agency to conform to principles laid down by the relevant minister.

The ATSB's SoE contains the following directive: *I expect the ATSB, in conducting its functions as Australia's national transport safety investigator, will continue to:*

a. *focus on improving transport safety as the highest priority;*

b. *give priority to transport safety investigations that have the highest potential to deliver the greatest public benefit through improvements to transport safety.*

So, it would seem the ATSB is just functioning in line with what their minister desires. But what the minister desires perhaps most of all is an ATSB that stays within budgetary limits.

"The ATSB's hierarchy of investigation priorities has been very long standing, and in my time we haven't amended it," Mitchell points out. "It has also been endorsed by successive governments over the years. When new ministers come in, things can get changed, but the hierarchy hasn't changed substantially over the years.

"We have a responsibility to operate within the budget we've been assigned. There has been a funding review of the transport safety bodies including ourselves, CASA and AMSA.

"They did some extensive benchmarking with industry operators such as RAAus as others as well. It's now a decision for government as to what changes."

Mitchell estimates the cost of a simple "desktop" investigation at around $60,000, with more complex investigations with boots on site running well into six figures and more. Think about those 13,000 reports and do the maths yourself. Even if the ATSB looked into 50% of them, the money spent would bankrupt a baron.

But money is not the only reason why the ATSB stays away from RAAus accidents.

"Self-administering bodies were set up for quite a clear purpose, and that was around an informed acceptance of higher risk and a lower regulatory burden," Mitchell says.

"In our investigations we make recommendations about commercial and VH-registered aircraft to the regulator. Sometimes it's around increasing training, sometimes it's about increased equipment requirements, sometimes it's about greater regulatory oversight.

"We don't just bring conclusions and findings, we also go into how we could make improvements; does the environment need modifications?

"If you're now modifying an environment that was set up to have a lighter regulatory touch, what does that mean to the whole system?"

It's a point well taken: how can RAAus be a low-regulatory environment and still adopt ATSB recommendations that would probably change the very nature of self-administration?

The point being

All of this begs the question why we investigate aviation accidents at all. Other than paying passengers, aviators since Gustav Whitehead have understood the risks of travelling in a medium as variable and unpredictable as machines that are vulnerable to failures.

"Our core remit is improving safety across the three modes of transport, so anything that improves safety is good," Mitchell stresses. "We certainly wouldn't say that it's acceptable that there are areas of safety that aren't being investigated, but we would say that any avenue that is going to increase safety improves the entire system.

"Aviation works within a system; nothing happens in isolation. It crosses various airspace categories, controlled and uncontrolled, some congested, some not congested. Whether you're RAAus or commercial, when you go from point A to point B, you cross many different environments. If we can improve any part of that, it benefits the whole system."

Finding out the root cause of an accident can lead to systematic or mechanical changes that prevent a particular failure from re-occurring, and therefore removing a risk for aviators and passengers that come after. It also identifies emerging trends that may need to be addressed before they become endemic.

"Investigating aviation accidents is a tragic but integral part of learning what keeps us safe," says Strategic Air's Tony Stanton. "The purpose is simple: preventing accidents and incidents and generating safety-related data.

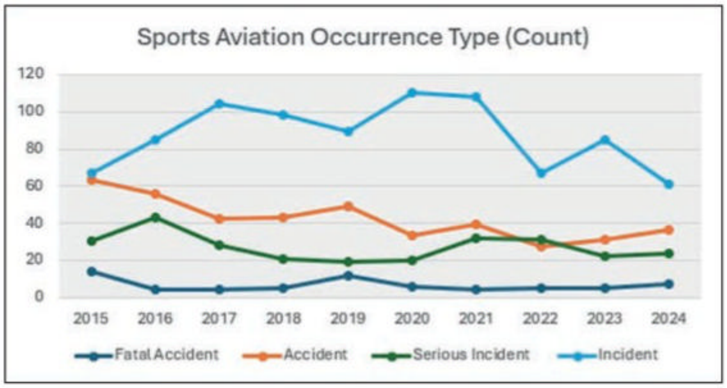


IMAGE: CASA

"The difficulty lies when we step back from the imaginary Nirvana world we wish we lived in and find ourselves in the real world where there are limits and choices about resources, money and time. The complicated reality is that it is impossible to investigate every aviation accident, and tough decisions must be made about which ones.

"So, maybe we need to move the conversation to being involved in and understanding investigation prioritisation rather than chasing a Nirvana outcome that will never happen."

Logically then, proper ATSB-driven investigations would increase aviation safety in the recreational sector, presuming all things are equal. The problem is that not all things are equal.

Data provided to *Australian Flying* from CASA shows that even without the benefit of full investigations, accidents in aircraft registered with an ASAO are trending down. The fatal accident rate per 100,000 hours in 2015 was over 3.5. Even after a particularly frustrating 2024, that rate has dropped to only 2.5.

This trend has led to CASA to be happy with the behaviour; an opposite trend would be sounding MAYDAYs at Marcus Clarke Street.

Regional Express
rex

IMAGE: REX COLLECTION

IMAGE: AUSTRALIAN TRANSPORT SAFETY BUREAU

ABOVE: The ATSB's top priority is to ensure the safety of RPT operations.
RIGHT TOP: RAAus CEO Maxine Milera would like the ATSB to investigate accidents in recreational aircraft.
RIGHT BOTTOM: ATSB Chief Commissioner Angus Mitchell

Coroners Court of Victoria
Victorian Institute of Forensic Medicine

IMAGE: GOOGLE STREET VIEW

A Victorian coroner would like the ATSB to investigate recreational accidents.

“proper ATSB-driven investigations would increase aviation safety in the recreational sector”

People familiar with safety trends at both the ATSB and CASA point out that there would be little to learn from accidents in the sport and recreation arenas because pilots are making the same mistakes repeatedly: mishandling, poor decision-making, misunderstanding or ignoring the weather, push-on-itis, poor/no fuel planning ... these are lessons we all should have learned years ago.

It questions whether or not we really have anything to learn from more pilot-induced disasters.

Druthers

RAAus is unwavering in its desire to have the ATSB fully and properly investigate accidents in recreational aircraft; coronial inquiries just don’t cut it for them.

“It is RAAus’ view that the ATSB should be adequately funded to investigate all fatal aviation accidents in Australia, including for all other ASAOs,” Maxine Milera says. “This would ensure the highest standard of independent aviation investigation in order to understand the factors that led to an accident, while offering safety findings to aid in preventing future accidents.

“Police and coroner’s findings are often not made publicly available, and RAAus requests that they be shared with members. However, this is typically at the discretion of the next-of-kin. When findings are made public, they can lack the detail and safety recommendations of an ATSB investigation.”

In February this year, a Victorian coroner agreed with Milera. After investigating the fatal crash of an RAAus-registered Jabiru near Lucyvale in the state’s north-east, the coroner found, “In light of the declaration by RAAus that it will no longer investigate fatal accidents involving RAAus registered aircraft, that the ATSB should investigate all fatal accidents involving such aircraft.”

Of course, the coroner has made no declarations about where the money to do that will come from. Angus Mitchell points out that it would literally take an act of government to comply with the coroner’s recommendation.

“The Australian self-administration model was set up to operate quite differently to how other countries oversight sport aviation,” he says. “That said, if in a future construct where government decisions or funding were to change our direction, we would have the skills to do recreational aviation investigations, but some understanding is needed about what potentially that would do to the sector. If the government position changes, we’ll adapt as necessary.”

Don’t hold your breath; it seems the current department is not in a hurry to find more money for general aviation accident investigations.

“The Australian Government provides the ATSB with revenue to support its operations as outlined in the Portfolio Budget Statements,” a spokesperson for the Department of Infrastructure, Transport, Regional Development, Communication and the Arts told *Australian Flying*.

“In 2023, the Government commissioned the Australian Transport Safety and Investigation Bodies Financial Sustainability Review (Skerritt Review) into the operations and sustainable funding for the ATSB and other safety agencies.

“The reviewer has provided a report to Minister King for consideration and the Government is currently considering the outcomes of the review.

“Our transport safety bodies are world-renowned and the Government is committed to ensuring they stay operationally fit-for-purpose, sustainably funded and are well positioned to address current and future investigation requirements.”

It would also appear the department believes the problem is not one that needs an immediate solution.

“Coroners and approved self-administering organisations have responsibilities to investigate separately to the ATSB and make contributions to aviation safety,” the spokesperson continues. “The ATSB is a global leader in accident investigation and may provide technical assistance to state police and coroners to support outcomes in the interests of safety.”

Now what?

Impasse: a word that perfectly describes what we have here. The Victorian coroner and RAAus want the ATSB to treat recreational accidents like all others; the government would prefer the ATSB focus on higher priorities, and the ATSB themselves, with some support from CASA, aren’t jumping up and down to change anything.

At the time of writing, the Skerritt report is still under wraps, being reviewed no doubt through election-coloured glasses. Only the conclusions of that report have the ability to free-up funding to treat RAAus accidents and GA accidents equally.

Tony Stanton is in a position to appreciate both sides of the argument.

“If more investigation needs to be done for recreational aviation, it must be done by the ATSB,” he says firmly. “The real-world questions that then follow are this: if ATSB funding is unchanged, and we investigate more recreational accidents, which of the other accidents don’t we investigate? Or, even more difficult to answer, if ATSB funding is increased, from where do we ask our government to take those funds? The question is easy: should we investigate more recreational accidents? Yes! The solutions are not so simple.”

Compiled with the assistance of CASA, ATSB, Strategic Air, the Coroner’s Court of Victoria, the Department of Infrastructure and Transport, RAAus and the police forces of Victoria, Queensland and the Northern Territory.

Qualified Sealant for any Aircraft, made in Australia
Just a click away
PPG
PRC®
Aerospace Sealants
PRO-SEAL®
Aerospace Sealants

Shop our *PRC* and *Pro-Seal* aircraft sealants in our new online store. PPG's Aerospace Sealants are globally recognized and locally manufactured in Australia, ready for immediate shipment.

Scan the QR code or visit anz.ppgaerospacestore.com

PRC and *Pro-Seal* are registered trademarks of PRC-Desoto International, Inc. © 2025 PPG Industries, Inc. All rights reserved.

Unsung Heroes

The term "aerial spotting" conjures up images of military balloons, or two-seat biplanes in WWI, or Cessna Bird Dogs in Vietnam. The advantages of a human view from above have not been lost with the passage of time, or the proliferation of satellites. **Paul Southwick** explores.

PARKS AND WILDLIFE SERVICE
Aviation Operations
VH-UN

IMAGE: DBCA

When it comes to the early detection of fires, to protect life and property, piloted aircraft still come out on top. For example, over the southern part of Western Australia (WA), Perth and other WA centres are surrounded by precious state forests, reserves, national and local conservation parks. Many urban and industrial areas also have bush and tree-rich parks and areas.

Whenever there's a big bush fire, television coverage focuses on the high profile water bombers, with the "spotters" or more correctly, "detection fleet" rarely mentioned. But their role in detection and coordination is critical.

IMAGE: PAUL SOUTHWICK

IMAGE: PAUL SOUTHWICK

ABOVE: The magnificent Scout in US colours.
RIGHT: A bush fire rages over WA.
MAIN IMAGE: Omodei, Prinsloo & Hemsley at Jandakot.

History

The WA Department of Biodiversity, Conservation and Attractions (DBCA), says that before aerial detection fleets, purpose built, fire lookout towers were common for detection, in Australia (and North America). It is a tough job, requiring 12 to 14 hour days. In WA there are still nine active fire lookout towers, although typically only seven are staffed during the peak fire season, the others on an "as needed" basis. The former Gloucester Tree Lookout near Pemberton, is 53 m above ground. Towers are limited by their fixed location and lack of over-the-horizon visibility in undulating lands. Satellites are used to detect and monitor fires in WA's remote regions.

The service began with a single Cessna 150. In the late 1970s the Forests Department began to replace the Cessna 150s with the Piper Super Cub aircraft. In the early 1990s the locally-manufactured Eagle XTS aircraft was trialled but, ultimately deemed unsuitable. In 1997 the first American Champion Scout aircraft were purchased.

In 2022 the WA detection team celebrated 50 years of service. By December 2024 it had exceeded 210,000 flying hours, or 40 million km, equating to 24 years of full-time flying.

DBCA is the only agency in Australia operating daily fire detection flights. Its aircraft contribute to the broader WA fleet that includes water bombing, aerial ignition, and air intelligence fixed-wing aircraft and helicopters, managed jointly by DBCA and the Department of Fire and Emergency Services (DFES).

The detection fleet also provides search and rescue support to the community, and have in the past conducted radio tracking of local wildlife, and assisted the police in search operations. The fleet operates out of aerial detection bases at Jandakot, Bunbury and Manjimup. During the peak fire season, there is a setup in Albany for a dedicated air attack platform.

The planes are flown by three full-time pilots, and 12 to 14 seasonal hires, performing district patrols according to weather conditions. The pilots are constantly looking for smoke or other signs of bushfire, and reporting back to on-ground fire managers with critical intelligence about prescribed burns or fires in a dynamic operational environment.

The department currently maintains a fleet of 10 ACA Scouts, the oldest being manufactured in 2011 and the youngest in 2023. It also has a Vulcanair P68R, manufactured in 2009, which has recently undergone extensive upgrades to its avionics and undercarriage system.

Evolving role

The team's Chief Pilot & Head of Operations is Brad Hemsley, who has been with the DBCA since 2016, replacing the previous chief pilot, who had been there for over 40 years. Hemsley believes that as the fleet has evolved, so has the role of the pilot. As well as aerial surveillance, once a bushfire is spotted, the pilots are often tasked with actively joining the fire suppression effort, helping to coordinate an "air attack." Hemsley says, "The role of the pilot is twofold: during the spring and autumn months, the department conducts its prescribed burn program. We fly overhead to report on how the burn is looking, and if the burn is remaining within pre-determined

IMAGE: PAUL SOUTHWICK

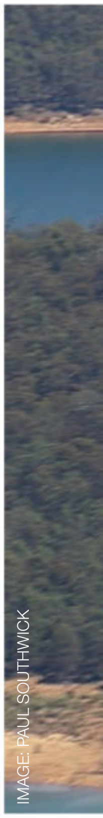


IMAGE: PAUL SOUTHWICK

"In 2022 the WA detection team celebrated 50 years of service. By December 2024, it had exceeded 210,000 flying hours, or 40 million km, equating to 24 years of full time flying."

boundaries. We provide any other intel that might be useful to the ground crews."

"We also map out the burn area so the duty officer can determine how effective the burn was for their planning. During the months of December to mid-April, we monitor these burnt-out areas to make sure there are no flare-ups. Peak summertime, with extended hot dry spells, are the worst conditions, with thunderstorms, and their associated lightning strikes creating the biggest risk, as the bushland is dry and ripe as an ignition source."

"The role also involves the aerial suppression part of the bushfire season, where we can be tasked with coordinating requested water bombing missions. This entails flying directly over an active bushfire at 1,500 feet, with an Air Attack Supervisor on board, helping to guide the water bombers towards the fireground, as required by the ground controller. Simple jobs can be managed by as few as two water bombers, while a very complex bushfire can involve up to 15 aircraft, including helicopters and large aerial tankers (LATs). The intelligence provided by the aerial detection fleet helps ensure the safety of firefighters and resources on the ground, and fire controllers put strategies in place to protect the community."

Hemsley says, "In our operations, change for change's sake is not a good reason for change. However, fire reporting technology is always evolving, so incremental change is necessary. We are always looking at and reviewing new technologies to see if we can improve our service. For example, pilots used to carry a big metal box in the aircraft with 20 to 30 maps. They had to pull out the right one to determine the correct grid reference for a fire. Now iPads, EFBs, and a new "click spot and send precise location" electronic mapping tool increase our overall efficiency and effectiveness."

While the fleet detects and reports on an average of 350 fires each year, the range of missions has expanded. Pilots have assisted in police searches and animal rescues.

In 2021–22, the fleet's fixed wing water bombers supported DFES's Grain Harvest Strategy aimed at protecting WA's highly valued grain harvest from the impact of bush fires. "We have roamed over large portions of WA, with operations as far north as Carnarvon this year, and as far east as Kalgoorlie several times in recent years," Hemsley said, "We go to the Esperance coast multiple times a year, with the occasional foray further along the coast to Caiguna and Forrest."

Erin Tassell, the department's Fire Aviation Manager, is originally from Canada, where she spent many years as crew on helicopters fighting fires in the west. Chasing summers, she found herself in Western Australia, specifically the Kimberly region, working on prescribed burn programs and remote insertion. Says Tassell, "The detection and suppression world is small, and in Australia I have come across many people I had met or worked with in Canada."

She commenced her current role in October 2024, after several years with the DBCA in other fire related positions. She has spent much time since then out in the field, responsible for coordinating the spotters with the water bomber fire aerial suppression and ground control teams, as well as liaising closely with The Department of Fire and Emergency Services (DFES). Says Tassell, "I like to get out of the office as much as possible, so as to keep up with all the quickly changing technological and operational developments in fire detection and aerial suppression."

Pilot acquisition

Hemsley says, "The service finds its new pilots via annual advertisements, typically in July, with interviews and check flights held in early August. New pilots undertake a week-long ground school (including returning pilots), which covers aircraft knowledge, and then focuses on the specifics related to our role of fire detection, learning to use fire maps, terminology, etc, as well as emergency procedures, and (permitted) pilot maintenance.

644
VH-PWL
PARKS AND WILDLIFE

TOP LEFT: Wildfire from above: aerial view of smoke plumes.

LEFT: Spotter aircraft VH-PWL at work.

BELOW: Easy access and lots of room up front.

BOTTOM: Huge, land-anywhere tyres make the Scout an ideal fire spotter.

The line training covers about 15 flying hours before pilots are released to their base where the senior pilot shows them around their new area of operations."

In terms advice for aspiring pilots Hemsley says. "As DBCA operate a tail wheel equipped aircraft, any new pilots must hold that endorsement, plus at least 10 hours in command of a tailwheel aircraft. The normal pre-requisites for a flying job also apply, that is, a Commercial Pilot Licence with a Class 1 Medical and an ASIC card. They also need a strong sense of self-reliance and self-discipline, as the flying is mostly the pilot up there on their own. Our remote bases are in country towns (technically Bunbury is a city), so being comfortable living away from home is also a must."

American Scout aircraft

The 8GCBC Scout is produced in Burlington, in Wisconsin, USA. It's a two-seat, high-wing, single-engine, fixed gear aeroplane that entered production in 1974. Length is 7.01 m, wingspan 11.02 m, height 2.96 m and wing area 16.72 m2. Standard empty weight is 650-680 kg for the WA detection fleet, and max take-off weight 975 kg. Standard fuel capacity is 136 litres, or 264 litres with an optional additional tank for the WA fleet.

The powerplant is a Lycoming O-360-C1G, of 180 hp (130 kW), driving a 2-bladed Hartzell constant-speed 2.03m diameter propeller. Maximum speed is 120kts at sea level, and cruise 110kts at 75% power. Stall speed is 43 kts with flaps down, and range 361 nm at 75% power, with normal fuel, and 785 nm at 65% power, with optional fuel for the detection fleet. Service ceiling is 17,000 ft, rate of climb: 1,075 ft/min. Take-off run to 50 ft is 312 m; and the landing run from 50 ft just 376 m.

The Australian Scouts are fitted with multiple radios. Detection pilots can be monitoring up to four channels at once, while communicating on two.

Are the fuel cap

IMAGE: DBCA

IMAGE: PAUL SOUTHWICK

Pilot viewpoints

We asked two of the pilots how they found their way to the fleet and what they like about the job.

Pilot Jayson Omodei, a 17-year veteran of the service, says that once he finished flight school at aviation college, he took a few years off to make some money. A friend recommended the service. In 2008 he applied, and was offered a job starting at Manjimup, on a seasonal basis. Between seasons he liked to study, and earned his instrument rating. Later he became a permanent employee and is now the Deputy Chief Pilot / Alternate Head of Operations.

Omodei's favourite thing about the job is that every day is different. He says, "It may be the same one and a half hour circuit of the area we fly, but as soon as you get a fire, it's action stations. I really enjoy the 'air attack' side where we guide the bombers to drop water. The aircraft is a fun plane to fly, and I now have over 5,000 hours in Scouts. There's a real satisfaction in making a perfect landing - which is not so easy, as with the large tires, on long struts, it can bounce back in the air if you get it wrong."

A typical day for Omodei means arriving early to deal with any administration, checking the weather, and conducting a preflight. Typical flights are at 5,000 feet, for good visibility of 50+ nm. Over a season, pilots average 400-500 hours flight time, with five days on and two days off.

IMAGE: PAUL SOUTHWICK

Denali SCOUT
N69GC

IMAGE: DBCA

MAIN IMAGE: Clouds build up over the bushland
LEFT: Typical beach in WA's north west coast.

Omodei's satisfaction comes from spotting a fire early, so that it is put out quickly and does not become a threat. The worst part of the job is seeing destruction of property or loss of life. He says, when this happens, it's natural to be somewhat distraught and wonder if there was something you could have done differently. In that sense, this is not a job without pressure. And it can also be thankless work, out of the public and media's eyes.

Pilot Bronwen Prinsloo spotted a helicopter water bomber in a park aged 11, and that planted a seed. Later she leant about the fire spotter pilots jobs when studying at the Western Australian Aviation College. That was in 2014, and she was still in school. She remembers well, Jenny Schmidt, now a Grade 1 flight instructor and examiner at the Royal Aero Club of WA, conducting an industry presentation which included fire spotting, and she was hooked. Says Prinsloo, "I found out what was required to apply for the job, and went and got it, with a successful first application in 2017." She is now acting in the full time role as the Senior Aviation Officer. Prinsloo joined with 215 hours, and now has over 3,000.

When asked what she likes about the job, Prinsloo replied, "Everything - I love being trusted to work by myself, day in and day out, without worrying about cargo or passengers. Self-discipline is so important, as we fly mostly by ourselves. You can't cut corners, take short cuts, or fall into bad habits. I feel I'm making a contribution, and every season is different – the places you go, and the people you operate with. Lightning days tend to be the big ones, as we will be chasing them all over the place looking for fires they've started."

When it comes to the Scout, Prinsloo says she too finds it fun to fly. She loves the great visibility from the big windows, which is what it is all about, when looking for fires.

In terms of her typical day Prinsloo says, "Some days you might be on the circuit all by yourself doing as many flights as requested that day, and sometimes you'll be sharing with other pilots. You might fly five times per day – especially if it's windy and hot – yes it can be bumpy up there; or only fly half the day and then do admin work; or clean up the hanger in the afternoon. There are always non-flying duties, but the hanger and clean aeroplanes are your workplace, which you want to be clean and tidy. There's nothing like arriving to see a nice clean aircraft. Also, with detection being a large part of our job, you need to be able to see out a clean window."

Australian Flying witnessed this first hand. Over several visits we noticed the offices, hangar, and aircraft, at both the main base at Jandakot (YPJT), and one hour flight to the South, base at Bunbury (YBUN) were always immaculate. When an aircraft was moved out for photography, someone appeared immediately to vacuum and clean the area where it had been. It's little things like this, and the professional way the team dressed and conducted themselves that projects the huge pride they all have in the service they provide and the valuable work they do.

World Fuel™
A World Kinect Company

World Fuel
CONTRACT
World Fuel

Fueling Australia's aviation industry for over a decade

From large and regional airports to remote aerodromes, the World Fuel carnet card empowers you to soar confidently to over 80 airports nationwide. Guided by friendly local experts and supported by the largest general and business aviation network, you can expect competitive pricing and simplified transactions.

Apply today!

Contact

australiaquery@wfscorp.com

world-fuel.com/anz

World Fuel carnet card benefits

- 24/7 fuel with competitively priced Avgas and Jet A-1
- No annual fees
- Earn World Fuel Rewards on every transaction

Avalon Highlights

Steve Hitchen reports on the 2025 Australian International Airshow.

Air show display programs are moving targets that keep organising teams on their toes nearly all the time. The larger the show, the more recalcitrant it is, so the Australian International Airshow, at the best of times, has the dedicated staff constantly dodging and weaving to keep it in line.

And Avalon 2025 may just be the best example of that ever.

From uncooperative weather and protestors to persistent aircraft gremlins and the show's first serious accident, Avalon 2025 seemed to be obstinately determined to thwart AMDA Foundation's best efforts.

Despite that, the organisers crafted a show that broke trade day attendance records and provided plenty of entertainment.

With the spirit of the spectacular 2023 post-COVID show watching over them, AMDA Foundation embarked on a program of revitalisation, expanding the footprint, creating a fourth exhibition hall and realigning the GA precinct.

Themes of technology and space were prevalent though STEM initiatives, in the exhibition halls and on the conference and seminar programs, pointing towards an aviation future that will be barely recognisable from the past.

Outside on the reconfigured display lines, the latest in GA aeroplanes like the Diamond DA50, Tecnam P2012, Cirrus Australis, Sling high wing and the remarkable Jabiru J432 twin were ready for inspection from the opening bounce. That the trade days etched a new mark in attendance levels showed the industry liked what it saw.

In the expo tents and the conference rooms, the emphasis was on new technologies and sciences, particularly UAVs, advanced air mobility (AAM) and Australia's foray into the space industry.

The presence of astronauts Mike Bloomfield and Australia's Katherine Bennell-Pegg added credence to the country's fledgling space industry. The two were instrumental in

ANSETT A
KANANA

MAIN: A DC-3 shows its flames to the Avalon crowd.

TOP LEFT: Jabiru had an example of their J230M with a redesigned cabin open for inspection.

TOP RIGHT: Matt Hall takes on a V8 Supercar.

IMAGE: ANTHONY MCKEE

AMPOL
Red Bull
IMAGE: JOHN ABSOLON

IRWAYS
VH-ABR
IMAGE: PHILIP HOSKING

“organisers crafted a show that broke trade day attendance records and provided plenty of entertainment”

IMAGE: PHILIP HOSKING

IMAGE: ANTHONY MCKEE

IMAGE: STEVE HITCHEN

IMAGE: ANTHONY MCKEE

MAK
TECHNOLOGIES
AVS
IMAGE: STEVE HITCHEN

CLOSKWISE FROM MAIN:
A USAF F-22 Raptor points its tailpipes to the audience.

Although the public day figures were down, the Sunday show was still well patronised.

The 100 SQN RAAF Mustangs departs from the Avalon runway.

100 SQN pilot Scott Taberner explains the finer points of the Spitfire Mk VIII.

Virtual reality and training simulators met in the expo halls.

presenting the beneficiaries of the Astronaut Al Worden Endeavour Scholarships, which will send four young Australians and teachers to the renowned Space Camp in Alabama.

Centre stage

Avalon is the major PR exercise for the Australian Defence Force, with all three services generally stumping up assets, lead by the RAAF. This year, they made a large commitment, with very little missing from the flying display; a Hawk 127 and Wedgetail the obvious absentees, and much of the 100 SQN aircraft stayed at home, with only the Mustang and Mk VIII Spitfire flying before the crowd.

Complemented by an F-16 Viper and F-22 Raptor from the USAF, the defence flying program was extensive, highlighted by various formations that demonstrated co-operation between assets. All three of the RAAFs air mobility haulers: C-27 Spartan, C-130 Hercules and C-17 Globemaster plied the skies in a simulated combat scenario, and a P-8 Poseidon worked in tandem with an RAN Sea Hawk Romeo.

Throughout the trade days, Matt Hall Racing and Paul Bennet Airshows flew the flag in what was a very sparse civil presence. Even the legendary Queen of Avalon, the HARS Super Constellation, didn't put in an appearance.

But the crowd didn't concentrate on what was missing; they were too focused on what was there, and stunning displays like Doug Hamilton's beautiful Beech 18 and a Piper Cub landing on a truck provided plenty of entertainment and were fantastic ambassadors for aviation.

Unfortunately, Avalon 2025 will be remembered for one moment in time: an accident on the Friday evening that hospitalised Paul Bennet Airshows pilot Glenn Collins. It was the first crash at Avalon since the first show in 1992, demonstrating that despite all the briefings, approvals experience and expertise, aviation can still fall victim to misfortune.

The incident stopped the traditional night show, and delayed the Saturday morning start to nearly 2.00 pm whilst the organisers scrambled to put something together for a crowd that clearly had not been put off by the events of the previous evening.

Credit where credit is due: AMDA Foundation's team put in long hours under great adversity and, despite continuing aircraft

IMAGE: JOHN ABSOLON

IMAGE: STEVE HITCHEN

IMAGE: ANTHONY MCKEE

IMAGE: STEVE HITCHEN

gremlins and a compressed schedule, did a sterling job.

The ADF program drew support from several overseas defence forces, including Germany's Luftwaffe with their A400M transporter, Singapore Air Force and the PNG Defence Force with their PAC 750XL. Even thought they didn't fly before the crowd, their ground presence added to the international flavour of Avalon 2025.

Grounded

Australia's general aviation community had a strong presence at Avalon this year, with many aircraft in both the outside expo area and the GA precinct, which was given over to flying clubs, associations and museums.

RMIT and CAE had expansive displays alongside commercial companies like Diamond, Tecnam, Cirrus, Dassault, Robinson, Guimbal and FlightStore. Add in Global Aviation Products with the Sling series and Jabiru's newest offerings, and the GA presence was before the eyes of the crowd at every turn. With the airside boundary moved back this year, many of the GA displays were on solid ground rather than grass, which made it easier to keep aircraft cleaner and present a very professional face to the general public.

However, the GA precinct itself was on a grassed area, the resilience of which had suffered from a lack of rainfall in the weeks leading up to the show. That seemed not to deter anyone and there was plenty of foot traffic around the tents and parked aircraft.

GFA, RAAus, SAAA, Seaplane Pilots Association of Australia and several other associations and clubs presented very professional facades to the general public, showing that aviation is not all about high-powered jets and energetic aerobats.

Whilst the north perimeter of the GA precinct was marked with AMDA Foundation's STEM tent and Expo Hall 4, the south end was defined by a GA Pavilion, made available for presentations and seminars. Highlighting the program was a celebration of the 100th anniversary of the de Havilland Moth range, but it does seem the GA community could have taken greater advantage of this facility.

The GA Pavilion was to have hosted the 2024 CASA Wings Awards presentation, but AMDA Foundation moved the ceremony to the Chairman's Suite, where CASA Chair Air Chief Marshal Mark Binskin (Ret'd) presented the awards in front of an appreciative gathering on the Friday morning.

Last words

Avalon 2023 was always going to be tough to beat. It was the first post-COVID show and people turned out in almost excessive numbers.

Having said that, the 2025 edition still exceeded 200,000 people, of which 60,000 attended on the trade days, eclipsing the old record by 10,000 heads.

The trade days included 902 exhibitor companies from 28 countries, plus 291 industry, defence and academic delegations from 43 countries.

"Avalon 2025 was all about engagement between industry, defence, the aviation and aerospace community and the general public," said Justin Giddings, CEO of organiser AMDA Foundation.

"Feedback from our exhibitors and Air Force is that once again the air show achieved this with flying colours, including the largest industry presence we have ever had at the event.

"In aviation and aerospace we are always trying to attract the next generation of innovators, and one of the great experiences of this event was seeing thousands of students learning about how aviation and aerospace can offer exciting and rewarding careers.

"We look forward to returning in 2027, to again deliver one of the world's great airshows, for industry and the Australian public."

Despite being a troubled child, Avalon 2025 still managed to fulfil its primary function: showcase Australia's aviation and aerospace industries to the world, and inspire the general public to engage in the world of aviation.

At the time of writing, the condition of pilot Glenn Collins is still relatively unknown. The thoughts of Australian Flying's editorial team, it's publishers and contributors are extended to Glenn's family and the team at Paul Bennet Airshows.

IMAGE: PHILIP HOSKING

IMAGE: PHILIP HOSKING

TOP: This stunning Piper M500 turned its share of heads.

ABOVE: This Lake Renegade came to Avalon all the way from Darwin.

OPPOSITE TOP TO BOTTOM:
Paul Bennet about to alight his Piper Cub onto a truck;
Astronauts of the future? Ruby-Jane Roberts and Amelia Taranto speak on behalf of the Astronaut Al Worden Endeavour Scholarship recipients;
Col Pay Award winner Cameron Marchant speaks as Australian Flying editor Kreisha Ballantyne and CASA chair Mark Binskin look on;
The RAAF Roulettes photo bomb this shot of a Sling High Wing on the Global Aviation Products stand.

GET *your* FEET WET

★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★

Floatplane Endorsements in our favourite aeroplane, the Super Cub on Wipline amphibious floats. Combine your love of the water and flying. The most fun training you will ever do!

Learn TO FLOAT

INSTRUCTIONAL FLIGHTS AVAILABLE 7 DAYS, STARTING FROM $3,500

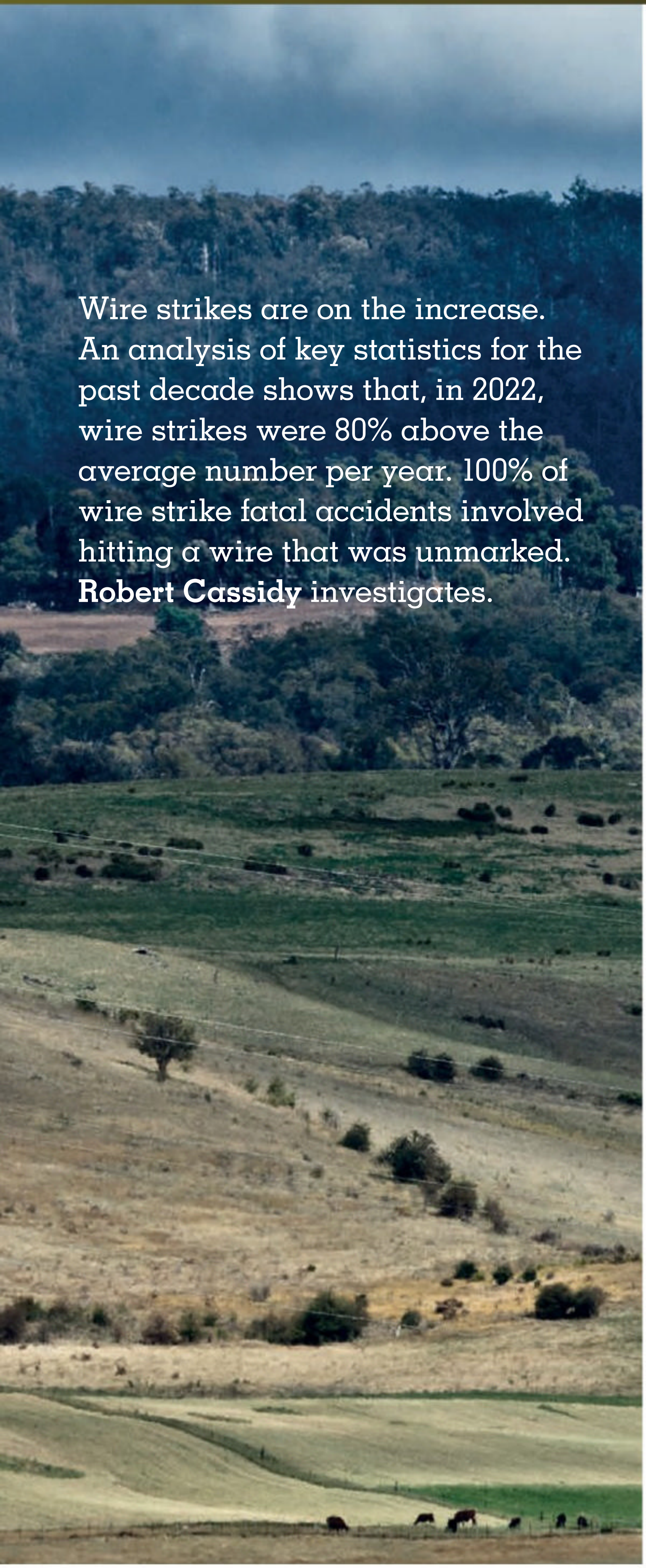
ADELAIDE BIPLANES

Aldinga Airfield,
South Australia

08 8556 5404
adelaidebiplanes.com.au

ROBERT CASSIDY

What Lurks Beneath



Wire strikes are on the increase. An analysis of key statistics for the past decade shows that, in 2022, wire strikes were 80% above the average number per year. 100% of wire strike fatal accidents involved hitting a wire that was unmarked. **Robert Cassidy** investigates.

IMAGES: ROBERT CASSIDY

There were 169 people involved in the 119 wire-strike accidents reported between 1994 and 2004. In almost two-thirds of these accidents, the occupant received some degree of injury. There were 45 people fatally injured, 22 seriously injured, and 42 who received minor injuries, performing aerial work in aeroplanes and helicopters.

Electrical and telecommunications wires exist in areas where you would least expect them, but there are other additional hazards throughout Australia. Have you considered the number of microwave and television towers and their guy wires, as well as wire fences? In most wire-strike accidents the pilot did not see the wire, forgot about its exact location, or became distracted.

Wire-strike accidents can result from failure to check wire locations before flying operations. This can be done in a number of ways. If a trusted source has already done an aerial or ground survey of a known route or area of operations and marked them onto a map, then you could transfer the information onto your paper VFR chart. Or, you could do the survey personally. More about that later. But this level of detail is required during preflight planning and preparation for low-level aerial work operations.

LEFT: There were 169 people involved in the 119 wire-strike accidents reported between 1994 and 2004.

Another reason for wire-strikes is unnecessarily flying low level IFR; that is, I Follow Rivers or I Follow Roads, when the weather deteriorates from VFR conditions, unexpectedly. Make your decision to divert or turn back early instead of scud-running.

What is the VMC criteria?

I would encourage you to review Part 91 Manual of Standards, Division 2.4. 2.07 VMC Criteria, Table 2.07(3), pages 31 to 34.

It is solely the pilot's responsibility to "see and avoid" in VFR conditions.

Please refer to the two photos of the same section of river. In one photo the wire is not visible. But, taken from a slightly different perspective, the wire becomes visible. And that was photographed in VMC.

What remains visible, however, in both photos, are the poles. And that is what you should be looking for that will help you identify the location of the wires. Look for the pole on one side and then the other. There will be a wire in between.

It will be next to impossible to see wires when flying close to the ground, especially when the windscreen is old and crazed (network of fine, usually arc scratches), splattered with bugs, or the sun in your face, or at night, even whilst wearing or using night vision devices. A grey catenary (wire-rope or cable) suspended between the tops of two lattice towers against a grey sky will be near impossible to see. And its lowest point will change heights, depending on temperature, wind, snow or ice accretion.

Poles and high voltage lattice towers can still be seen. You must constantly scan and have your head out of the cockpit to see them though.

A pilot's ability to see and avoid a collision with wires is complicated by the plethora of visual cues from different perspectives when flying close to the ground. Vegetation of different colours, water, light and shadows, sunlight in your face, trees and topography, high-wing versus low-wing aeroplane and cockpit ergonomics, such as a centre-post or window/door I-frame, for either an aeroplane or a helicopter.

Human Factors

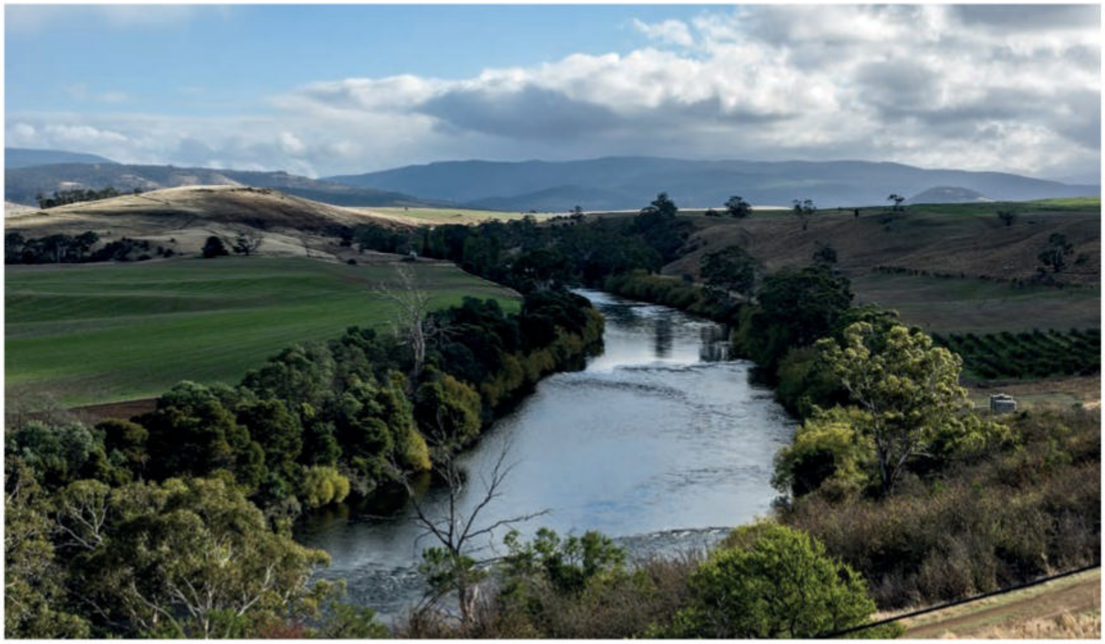
Other human factors to consider: you should be aware that a delay of 80 milliseconds between visual stimulation and cognitive perception has been demonstrated, which equates to 4.9 metres at 120 knots.

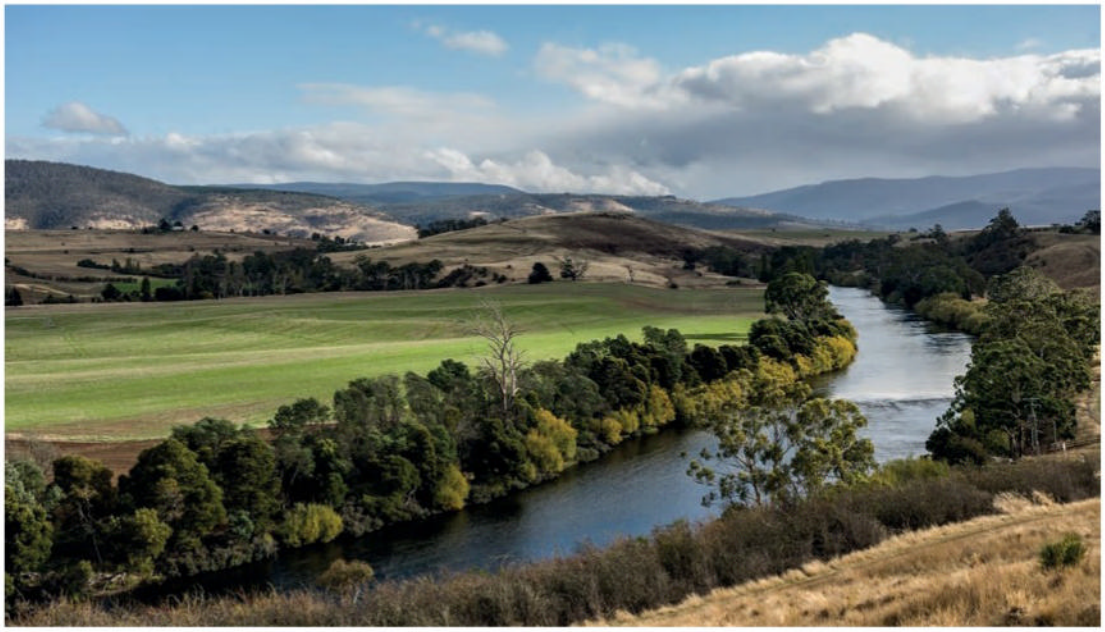
Moreover, it takes a lot more time to recognise that you are on a collision course and to take evasive manoeuvres. Furthermore, there are limits to your span of vision. Human eyes can detect movement and form in an arc of around 187° (degrees). But areas beyond this arc are unclear and any visual response mainly to due movement. So, practically, the useful arc is more like 120° (degrees). Additionally, the area where the eyes clearly focus is in an arc of 6 to 10° (degrees) from centre. Don't forget the centre blind spot. Further, the rush and blurring of objects in the pilot's visual periphery can create a sort of tunnel vision, making accurate observations difficult. Avoid head down time or eyes inside the cockpit, when low-level and in an area of wires or obstacles. There will be a delay to refocus your eyesight from the instrument panel to some distance outside the cockpit. This refocusing is known as accommodation. You need to keep your head on a swivel and constantly scan for poles, towers and wires. Be vigilant.

When I served in the US Army as a Bell Iroquois pilot, we not only flew at low-level, we flew lower, at nap-of-the-earth heights (terrain following) in formation, too. We also flew low-level, at night, without night vision goggles. We were well briefed and well prepared for those tactical flying activities. I am fairly confident that information is not taught by any flying instructor holding a CASA rating.

For example, for a night low-level operation, if we were exposed to the sun prior to the mission, we wore our sunglasses, minimised our exposure to bright light, did our preflight briefing and preparation, under red ceiling lights (only) for a minimum of 45 minutes and there was minimal lighting on the ramp. In the aircraft we used minimal illumination and could switch our navigation lights to dim setting. There were only a very few first-generation night vision goggles and they were not issued to our unit. There were ground surveys done by trained personnel and usually a senior pilot who knew what to look for, and communicate

"Look for the pole on one side and then the other. There will be a wire in between."





TOP TO BOTTOM: While the wire can only be detected in one photo, what remains visible in both photos are the poles.

GREAT MAGAZINES .com.au

RENEW OR SUBSCRIBE

with auto-renewal for just **$6.70**
PER ISSUE (print + digital copies)

AUSTRALIAN Flying
australianflying.com.au
QA | Recreational | Sport
MEET THE CASA WINGS AWARDS WINNERS
NO CO-PILOT REQUIRED
The Future of Personal Jets
TURBINE TRIUMPH
We Fly the NZAero 750XL
JIM DAVIS
The Dreaded Hammerhead
FLIGHTS OF FANCY
10 (Mostly) Ridiculous Aviation Achievements

MAGAZINE
The latest aviation news, reviews and tips delivered to your door

DIGITAL
Instant access to each digital copy via Zinio

VISIT **GREATMAGAZINES.COM.AU/AUSTRALIANFLYING**
OR CALL **1800 807 760** AND QUOTE **AUTO-RENEWAL**

Conditions: This offer is only available to readers with an Australian postal address. By subscribing via auto-renewal you give Yaffa Media authorisation to charge your nominated credit/debit card account or direct debit bank account regular amounts, in regular instalments, as set out in the terms of the subscription you are purchasing, until you request it to be stopped, or your card or account expires. You may voluntarily stop your subscription at any time by providing Yaffa Media's customer service department (subscriptions@yaffa.com.au) with written notice. For full terms & conditions, visit www.greatmagazines.com.au.

YAFFA 15781

RIGHT: The best line of defence are the pilot's discipline and vigilance.

BELOW: In most wire-strike accidents, the pilot did not see the wire, forgot about its exact location, or became distracted.

that back to our commander or his designated briefing officer. On the ground, there were ground crew with cyalume sticks in each hand to guide our ground manoeuvres. Thorough briefing, flight planning, and safety were built into the whole low-level operation, especially at night. Nothing was taken for granted.

When we were flying to a unfamiliar location, we performed a high reconnaissance, searching for probable approach and departure path, looking for wind direction, level and smooth landing area/zone, topography, and any hazards, such as boulders, and wires, by identifying the poles or towers.

After we performed a "high recon", then we performed a "low recon", to further ascertain what we saw. We did our approach briefing and before landing checks and did what we had to do to get the Iroquois on the ground in one piece.

Did I ever have a close call with wires? You bet, at night, in the mountains, on approach to a confined area, surrounded by mountains and trees, in a Bell 206B II Jet Ranger, as a charter pilot, when the landing area was only illuminated by a circle of vehicle parking lights and head lights. On my slow, steady, steep approach, with the tail rotor just clear of the trees a pole and three wires appeared very suddenly out of nowhere, in the middle boiling reddish dust, in the middle of the best landing zone I had identified in my high reconnaissance. I pulled pitch, immediately, got on instruments, and made a very steep climb. I located another suitable landing zone and safely landed there.

Not all wires are equal

Additional thoughts to consider: microwave or television towers, which have their guys wires that extend out at quite some distance from the tower, depending on height and, angled toward the ground. Single Wire Earth Return (SWER) systems and telecommunications wires, and wire fences, could be a hundred of kilometres long on large outback stations and it would be financially unviable for them to mark them. Think outside the box. Ask yourself, "Where would I locate a utility pole to suspend the wire?" If available, a pilot could pre-breathe oxygen, to oxygenate their red blood cells to improve night vision.

Lastly, the best line of defence are the pilot's discipline and vigilance, comprehensive awareness of the hazards, thorough preparation and their eyeballs. There have been many fatal aircraft accidents, though the aircraft were equipped with wire cutters or deflectors. An aircraft's speed, construction, angle the aircraft strikes the wire and the make-up of the cable, single strand versus multiple spiral-wound cables, and line tension all factor into survivability.

By the way, I do not hold a CASA low-level rating, but I can assure you that I know more about the subject than those who are certified to teach it. I was trained by the US Army. Part of our training was flying under, and in close proximity to powerlines to build our confidence and help us to know what to look for. Flying low-level was our specialty.

You may find the aforementioned statement a bit contemptuous of over-regulation by CASA, but I did low level flying in the US Army and later as a civil pilot, in helicopters, decades before a "low-level rating" or its regulations existed in Australia. The FAA still does not have a low-level rating requirement.

How did I ever survive? Discipline, vigilance and leaving nothing to chance.

2025
MUDGEE
CLASSIC

GRAVEL + ROAD
CYCLING EVENT

3 – 4 MAY, 2025

www.mudgeeclassic.com.au

AUSTRALIAN OWNED AND OPERATED

STRATEGIC SPONSOR

NSW GOVERNMENT

Destination NSW

NATIONAL AUTOMOTIVE PARTNER

VOLVO

@TheCyclingClassics

YAFFA 16036

Free from the Bonds of the Earth

Over 9 days in January, the NSW Group of the Australian Air League held its annual summer flying camp at their Air Activities Centre located at Camden Airport. **Brian Grinter** reports.

Held annually for over 20 years, the camp is designed to allow the young cadets to kick-start their flying training. Many past students have gone on to exciting careers in aviation.

The Australian Air League is a youth group for girls and boys aged 8 years and older who have an interest in aviation, either as a career or as a hobby. In the Air League, they attend their local squadrons (located in most states) each week, where they learn about aviation in all its forms through classes in flight theory, navigation, aircraft engines and a variety of other fascinating subjects.

The Air League began offering flying training at Camden Airport in 1980 in cooperation with the Scouts Air Activities Centre and, in 1986, established its own Air Activities Centre also at Camden. The centre is owned and operated by the NSW Group of the Australian Air League, with a fleet of three training aircraft, including a Piper PA-28 Warrior, Cessna 172 and Cessna 152.

The centre provides cadets with the opportunity to undertake air experience flights and flying training, as well as participate in the flying camps held during school holidays. It is staffed exclusively by volunteers, and for nearly 40 years it has provided thousands of air experience flights and training hours to members of the league, helping to realise the league's motto, *A Vinculo Terrae* - to be "Free from the Bonds of the Earth".

This year, 22 student pilots aged from 14 years attended the 9-day camp, coming from 9 Air League Squadrons across the state. For the week, they lived, studied, and worked together at the airport while undertaking flying training with the Air League's volunteer instructors.

The camp's cadets had a wide range of flying experiences; for some, this was their first camp where they could experience the taste of flight. For others, it was an opportunity to build on their training from previous camps and to catch up with friends from prior years.

The ab-initio students' training started with briefings from the instructors that covered basic aeronautical knowledge and the mechanics of flight. Soon after, they began their flying training with lessons on the effects of controls, progressing to climbing and descending, turning, and then on to other manoeuvres. They also learnt about airfield operations and safety, including how to perform pre-flight inspections on the aircraft and how to refuel the planes.

For the returning cadets, this camp was an opportunity to build on their training from previous camps and renew friendships made in previous years. These cadets undertook more advanced training, including circuits, stalling and practice forced landings for their Recreational Pilot Licence, and two cadets achieved their first solo flight during the camp!

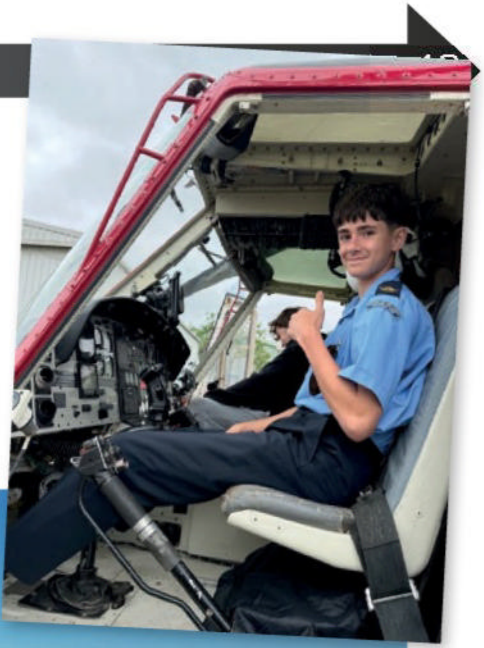
Unfortunately, the weather is the one thing we still can't control and after a few days of fine weather, the camp was hampered by several rainy and overcast days, preventing the cadets from completing as many flights as they had initially intended. Despite the interruptions, they still made the most of the opportunity and

IMAGES: AUSTRALIAN AIR LEAGUE

MAIN IMAGE: Student pilots with with the club's Warrior, VH-LRA.

LEFT: Cadets check out the firefighting helipcopter.

BELOW: Cadet Daniella Chapman preflights the club's Cessna.



completed 89 flights and 91 hours of flying during the week – not a bad effort despite almost two full days lost to rain!

For any pilot, completing that first solo flight is one of the highlights of their flying training, and the summer 2025 flying camp saw two cadets undertake their first solo circuit. Congratulations go to Leading Cadet Jensen Reynolds of Manly Sqn and Leading Cadet Griffin Coombes of Marrickville Sqn, who completed their first solo flights in PA-28 Piper Warrior VH-LRA under the supervision of instructor and Head of Operations Charles Droudis. A great effort by both of them!

Along with flying training, several other activities were planned for the cadets to make the camp memorable. These included a visit to the airport by the NSW Police in their Bell 429 helicopter PolAir 4 to learn about the work of the NSW Police Force Aviation Command and also the NSW Rural Fire Service, who were operating a Bell 412SP helicopter for firefighting duties.

On one of the rainy days, the cadets had the opportunity to visit the control tower to meet the Airservices Australia controllers responsible for safe operations at Camden Airport. They also visited GB Aviation, one of the aircraft maintenance companies at Camden Airport, where they learned about aircraft maintenance and saw a Pitts Model 12 in the workshop with a massive nine-cylinder radial engine putting out over 400hp.

Finally, they also visited the hangars of Air Combat Australia who offer jet fighter adventure flights. Here, they could inspect their jet-powered Czech-made Aero L-39 Albatros.

In addition to the aviation activities, there were plenty of other recreational opportunities, such as movie nights, football games, as well as visits to the local swimming centre, and bowling alleys in the evenings.

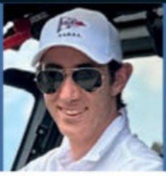
On the last night of the camp, the cadets, instructors, and staff dressed in their Air League uniforms to participate in a formal Dining-In Night, marking the end of the camp. During the dinner, the cadets received many awards for their accomplishments during the week, and the instructors who volunteered with the Air League received the League's gold pilot's brevets in recognition of their service.

Camden Airport is home to many flight schools and flying clubs, as well as youth and community groups, such as the Air League, Scouts Australia and Phoenix Aero Club. This year, the dinner was attended by Mr Neil Alexander, Head of Operations for the Scouts NSW Air Activities Centre, and Mr Jonathan Lam, Head of Operations for Phoenix Aero Club.

The success of the camp was in no small part due to the assistance some of these groups provided: the Scouts NSW Air Activities Centre, who made their facilities available to help with catering and ready rooms for the student pilots, as well as Mr George Raby and the team at Altocap Flight School, and Phoenix Aero Club, who were able to provide additional cross-hired aircraft.

Finally, running a flying camp for 22 student pilots is not a small task. This camp would not have been possible without the assistance of the instructors and camp staff who volunteered their time to train the cadets and feed and look after them for 9 days.

ROBERT MASSERA



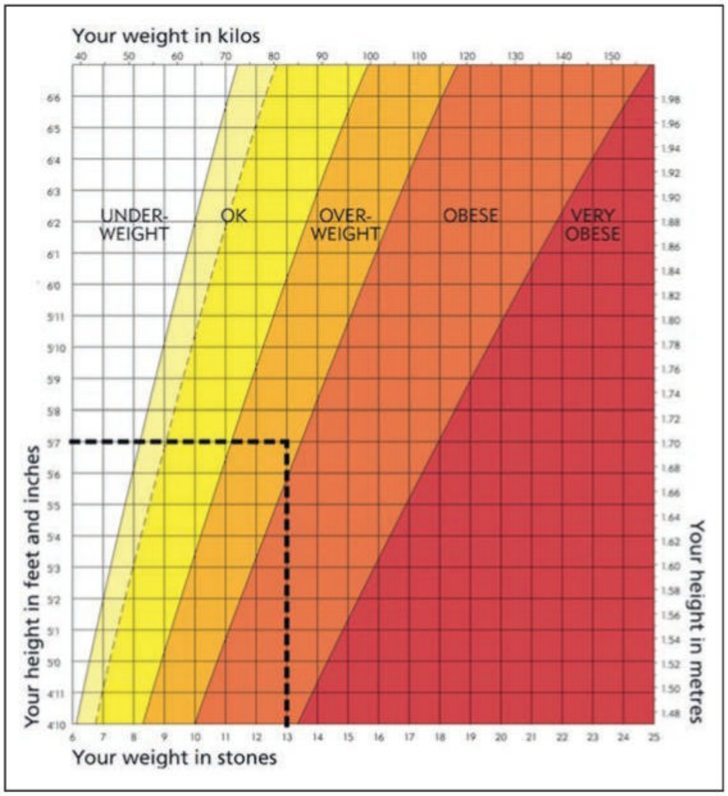
Dr. Rob Massera MBBS, BMSc (USyd), is a private pilot and CASA designated aviation medical examiner (DAME), who loves flying, aviation-medicine & keeping pilots in the air.

Weight and Balance

*In this new, regular series, DAME **Robert Massera** takes a look at the health issues affecting pilots.*

Did you know that in Australia, 66% of adults and 25% of children are overweight or obese, and obesity is now the second most common cause of preventable death after smoking?

Maintaining a healthy weight is crucial for pilots, as excess weight increases the risk of cardiovascular disease, fatigue, and reduced mobility in the cockpit. Obesity can also impact reaction time, endurance, and overall well-being, potentially compromising flight performance. A healthy lifestyle ensures sustained alertness, stamina, and compliance with medical certification requirements.



ABOVE: Your body mass index is a measurement used to assess a person's body weight in relation to their height.

What is 'overweight' and 'obese'?

Simply put, overweight and obesity mean carrying excess body fat, around the abdomen in men and thighs or buttocks in women. It is more than cosmetic. Excess weight is an unhealthy physiological state that increases the risk of serious health problems, which can impact your performance and fitness-to-fly.

Why is being overweight or obese relevant to pilots & aviation safety?

Being outside your healthy "weight & balance envelope" is an undesired aviator state, that impacts performance and fitness-to-fly. Why? It isn't just a number on a scale? It contributes to: high cholesterol, diabetes, high blood pressure and heart-disease, as well as sleep apnoea and hypoventilation syndrome (which causes hypoxia at altitude). These conditions can impair or incapacitate a pilot. Maintaining a healthy weight isn't just about passing your medical; it's about staying fit and capable every time we hop into the cockpit.

Consider this: during pre-flight planning we calculate the aircraft's weight & balance - If it's outside limits, would you:

(a) ignore it & take off anyway?

or

(b) take corrective action, ie remove fuel or baggage, to avoid in-flight safety risk?

The same logic applies to your own weight & balance. Staying within limits isn't just ideal, it's essential to your long-term health & performance.

What causes overweight & obesity?

Weight gain isn't sudden, it creeps up over time due to many factors, such as: genetics, unhealthy food at airports, irregular exercise, sedentary-work, sleep disruption & stress. At its core, it is caused by an imbalance: taking in more fuel (calories) than we burn over a long period of time. Fortunately, our "biological machines" are actually very good at regulating our weight - but even small excesses add-up over time.

Think about it: an average Aussie consumes 100 kg of dairy each year (10 kg yoghurt + 90 kgs of milk) yet gains just half a kilo annually. Even so, over 10 to 20 years that adds up to 10 kg to 20 kg of excess fat!

If there is just one causal factor to avoid, it is a diet high in hidden sugars & simple carbohydrates.

What are the symptoms and how are they diagnosed?

The signs are obvious but the symptoms go unnoticed, such as: craving sugary foods, using food to cope with stress, anxiety or low mood, "belt-creep", fatigue, daytime sleepiness or snoring (symptoms of sleep apnoea), sweating, breathlessness and reduced exercise tolerance. It is diagnosed by your GP or DAME using: height, weight and waist circumference to calculate your Body Mass Index (BMI) and Waist-to-Height Ratio (WHtR).

Can I fly if I am overweight or obese?

Yes. But be warned. While pilots can carry excess weight for years before serious issues arise, overweight and obesity are undesired aviator states that threat your fitness-to-fly. The key is to recognise it and take corrective action before it impacts your health or medical certification.

How does being overweight or obese affect my medical certificate?

Being overweight increases the risk of numerous conditions that can ground pilots: high blood pressure, diabetes, heart disease, stroke, sleep apnoea, joint problems, reflux, mental health issues and even certain cancers. The more excess weight, the greater the risk. Because of these risks, CASA requires additional medical tests for pilots with obesity:

- BMI > 30 (40 years & over) or
- BMI > 35: Fasting blood glucose, + oral glucose tolerance test + sleep study
- BMI > 40: Cardiological assessment + comprehensive tests + a sleep study + an operational check with a CASA testing officer.

Pilot Warning: overweight/obesity also increases the risk of sexual (erectile) dysfunction which won't impact your fitness-to-fly but will certainly impair your performance!

What is the best treatment?

Regular "preventative maintenance" is the best - such as: good nutrition, regular exercise, sleep-optimisation and GP-checks. However, definitive treatment of obesity may also require medications (such as Ozempic) or weight-loss surgery. The medical or surgical management of obesity in pilots requires consultation with your DAME, because weight-loss medications may be incompatible with flying and surgical recovery will require a grounding period.

> « Obesity increases the risk of sexual (erectile) dysfunction which won't impact your fitness-to-fly but will certainly impair your performance! »

What countermeasures and corrective actions can pilots take?

Early recognition and corrective action is key:

- **Nutrition:** prioritise high-protein, low-GI meals to maintain energy and avoid blood sugar crashes and stay well-hydrated as dehydration can mimic hunger.
- **Resistance training:** increases resting metabolism and burns excess fat.
- **Rest & Recovery:** a consistent bedtime and 8 to 9 hours of sleep a night regulates metabolism and cravings. Monitor your W&B and numbers like you do aircraft performance.
- **The Bottom Line:** with the right "maintenance-cycle", weight gain is preventable and weight loss is achievable. Losing just 5%-10% can keep you fit, certified, and in the cock-pit for years to come.

Foxbat KELPIE

YouTube

Search for Aeroprakt A22LS

www.foxbat.com.au

Aeroprakt A22LS

- Cruise 40-108 knots
- Stall 27 knots
- Carry 290kg including fuel
- Fuel capacity of 113L

A bird's eye view

Acclaimed artist Andrew Vukosav is an Angel Flight pilot and world-renowned aerial landscape photographer. **Kreisha Ballantyne** explores.

ABOVE: Andrew's journey with Angel Flight began many years ago.

LEFT: "Every person I fly has a story," he reflects

Angel Flight pilots come from all walks of life and if you dig a little deeper, you'll often discover an incredible range of passions and talents beyond the cockpit. One such hidden gem is Andrew Vukosav, a creative force who has seamlessly combined his love for flying with a deep artistic vision. Today, he's not only a valued Angel Flight pilot but also a world-renowned aerial landscape photographer.

Andrew's journey with Angel Flight began many years ago. As a trainee pilot, he joined his instructor, Tony Provan, on a mission to collect passengers from Mildura and transport them to vital medical care in Melbourne. The experience left a lasting impression.

Once he reached the required flying hours, he was mentored by long-time Angel Flight stalwart Peter Moran and quickly became part of the volunteer pilot crew.

Photography has been at the heart of Andrew's life since 1982. He built a successful career in fashion and advertising and is a highly accomplished commercial fashion photographer and a recipient of the prestigious Cannes Lion award. With a career spanning multiple continents, including Australia, Asia, and the U.S., he has worked with globally recognised brands and publications such as Harper's Bazaar, Elle, Vogue, Singapore Airlines, Coca-Cola, and McDonald's.

In 2016, on a flight to Darwin a new chapter in Andrew's career emerged—one that merges art, aviation, and community to bring the world unique aerial perspectives of Australia's landscape.

Andrew reflects; "The original inspiration for my photography collection: Longitude Latitude Solitude was born when I flew to Darwin back in 2016. I attended the NAATSIA awards and I met artist and elder Mr Simon Hogan from the Spinifex Art Project."

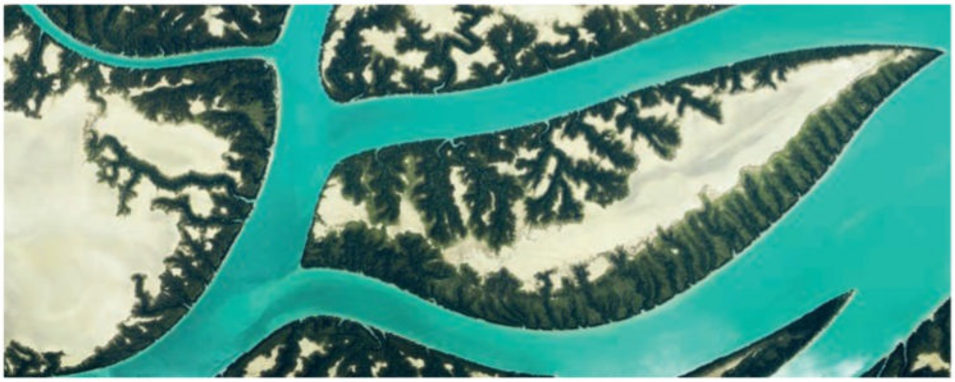
The experience offered him an extraordinary window into one of Australia's most historically rich Indigenous art communities and Simon remains Andrew's mentor and inspiration to this day.

To fully capture the striking beauty of the land from above, Andrew modified his aircraft, installing a 150-megapixel Phase One camera into its underbelly. The entire plane functions as a camera body, with Andrew remotely operating the lens via Wi-Fi and an iPad—allowing him to frame each image with precision.

"I see myself as a messenger for Mother Nature's artistry," Andrew says. "Flying allows me to explore the land from a perspective many never get to see—and being able to share that beauty is a gift."

Blending his love of flight with a desire to give back, Andrew says being an Angel Flight pilot has been especially meaningful and would recommend it to other pilots wanting to fly with purpose.

"Every person I fly has a story," he reflects. "It's been really lovely to do something for the greater good. Each mission is a reminder of how powerful human connection and kindness can be."



LEFT: the magnificent Coburg Marine Park in Iwaidja Country, NT

Great Coastal Walks Australia

Australia's must-do walking experiences

Embark on a breathtaking journey along Australia's most stunning coastlines with *Great Coastal Walks Australia*. This exquisite coffee table book takes you through each state's finest coastal tracks, from the iconic beaches of Sydney to the remote wilderness of far-flung destinations.

Journey with bushwalking writers as they guide you along:

- Victoria's rugged Shipwreck Coast
- The idyllic Whitsundays
- South Australia's picturesque Fleurieu Peninsula
- Tasmania's pristine Bay of Fires
- The iconic Cape to Cape Track in Western Australia … and many more hidden gems waiting to be explored!

Handpicked by *Great Walk*s magazine editor Brent McKean, each chapter offers rich history, must-see features, and expert tips on how to make the most of these extraordinary trails.

With stunning color photography that captures the raw beauty of these coastal wonders, *Great Coastal Walks Australia* will inspire you to lace up your boots and start planning your next trek!

Discover the wild beauty of Australia's coastline—one step at a time.

Great Coastal Walks Australia
Brent McKean
Brent McKean
Sunshine Coast (I)

ONLY $39^99 RRP

Get your copy now!

www.greatwalks.com.au/great-coastal-walks

YAFFA 16440

Lessons from a logbook

JIM DAVIS

Jim Davis has a passion for instructing. He has been training civil and military pilots, in the air and on the ground for 50 years. His other passion is writing, which he studied at Curtin University in Perth. You can see, and buy, his two pilot text books PPL and Flight Tests at www.jimdavis.com.au

Look, Ma – no Hands!

Jim Davis details the importance of trim and flaps.

It's traditional to bitch about the regulator, but we have been lucky to have some really brilliant CAA/DCA bosses here in South Africa.

I want to tell you about the great Robbie Robinson who sadly died recently. Robbie made every test a learning experience, and his favourite exercise was the steep turn.

We were doing a SAAF wings test and I remember struggling round a 60 degree banked turn in an Aztec over the Cape Recife lighthouse on the southern tip of Nelson Mandela Bay.

Struggling because I hadn't practiced, and because you don't have a nose to watch in a twin, and because the Aztec needs a fair amount of physical muscle to hold her at that angle without losing height.

"Are you comfortable?" says Robbie.

"Grunt," says I.

"Why don't you trim?"

"Am I allowed to?"

"Who said you're not?"

So I grab the overhead window winder and give it a couple of twirls which takes much of the pressure off the stick.

"Okay, I've got her," says Robbie as he takes over and gives the trim another couple of turns. Then he takes his hands off and sits back smiling as we sail round and round with our hands in our laps. That was one of Robbie's favourite tricks – he had this thing about trimming – in fact he had a trim wheel at home which he wanted to be buried with him.

Before one test he showed me the back page of the form. He had signed it and written PASS. He just smiled and said, "Don't disappoint me." He was really saying, "I have confidence in you – now let's go and have fun." What a wonderful instructor.

All that is an intro to say that if Robbie thought so highly of trimming then maybe we should all take it seriously.

Actually, my first two experiences of trimming were vastly different. I did all my PPL training in a 65HP Piper J3 Cub. I learned that the trim needed to be set neutral before takeoff if you had two on board and there was another mark for solo flying.

We didn't adjust it round the circuit because we didn't need to. We were either climbing, or in level flight, or in a glide, for such a short time it seemed unnecessary. Dirty Bossie, our instructor, would shout at me not to fiddle with things.

"Hell", he explained, "you have a stick, a rudder and a throttle – we don't want to fry your little brain with extra stuff, do we?"

I went straight from being in command of an aeroplane with five instruments to being unofficial co-pilot on a Comanche with about 300 instruments. Whenever we went anywhere, my boss, Old Piet van der Woude would take off, climb and level off and then spend the next few minutes making minute adjustments on the overhead trim handle.

It was a delicate process that called for infinite patience. The idea was to get the aircraft 'on the step', which I now know is nonsense, but at the time it was an elusive condition over which God granted dominion only to the world's top pilots.

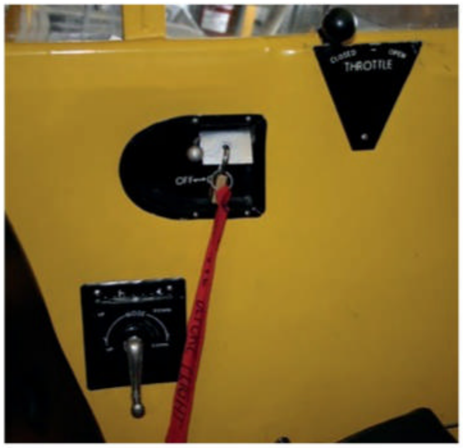
Old Piet would eventually get the nose tucked down and the Comanche going like an express train. He would hand over to me and we would lose 10 mph almost instantly. This would cause a thinly restrained air of hostility in the cockpit for the rest of the flight.

Robbie taught me that trimming properly is the hallmark of a good pilot. The aircraft should always be trimmed – hands off. But one is allowed a few seconds of stick pressure during takeoff and landing.

As an instructor, you will need to differentiate between levelling off in the circuit and doing so at the top of climb on a cross-country. In the circuit, a new pilot simply doesn't have time to trim hands-off for

NOSE L
N
NOSE R

TH
NH
NEUTRAL
ELEVATOR TRIM
NH
TH



each leg. The best they can do is to take most of the load off the stick for most of the time.

And in line with my belief that the more you know about the aeroplane the better and safer pilot you will be, you, as her flying guru, need to understand how the trim works on every aircraft you fly. Not sure that a knowledge of the trim system can be a life saver? Let me give you two examples.

One of Placo's engineers took off from Plett in a 250 Comanche. Soon after takeoff the elevator went sloppy in his hands; easing back on the stick did nothing. The elevator cable had broken. He throttled back gently and the aircraft landed in open country straight ahead without too much damage.

Could he have done better?

Indeed he could. He could have flown it safely round the circuit and landed normally. But only if he had time to think it through.

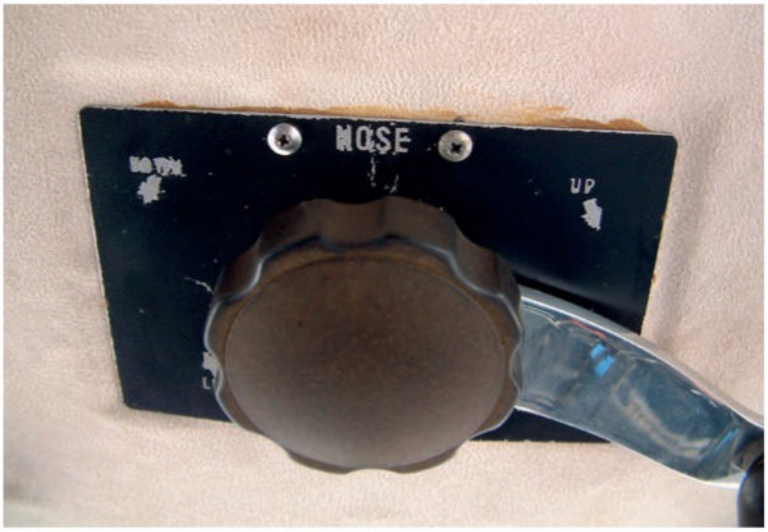
When I said the elevator cable had broken – he would have known it actually has two elevator cables – one up cable and one down cable. Only the up one had broken. This means that had he trimmed up, he could have flown and landed by simply using forward pressure on the stick.

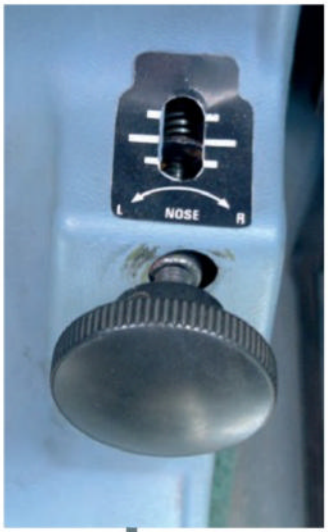
Here's the other one. My friend Bob Ewing came within inches of being killed when the elevator of a Yak 52 jammed. He had been doing negative G aerobatics. As he tried to pull out the stick locked up solid, it simply would not move back.

1
2
3
4
AILERON TRIM
JOE PIETERSE NOV '23

RIGHT: The dome of the Taj Mahal is just visible beyond the trees, for the runway points at them straight as a cannon.

INSETS LEFT TO RIGHT: The trim of a Seneca; Elevator trim of a Harvard; the trim on a J3 Cub.





FAR LEFT: The trim on a Piper Aztec

LEFT: The rudder trim of a Cherokee

RIGHT: Bob Ewing came within inches of being killed when the elevator of a Yak 52 jammed.

Luckily Bob was near Bhisho which has a nice long tar runway. He found that if he maintained 120 mph the nose would be about level, but if he throttled back, even slightly, she would pitch down. He didn't dare to lower the undercarriage, partly because it was too fast, but mainly because it would pull the nose down.

With a lot of skill Bob managed to land on the runway at that speed, with the gear up. He and the pupe struggled out of the wreck before it caught fire.

Could he have done better?

Actually, yes.

The aircraft has a standard trim tab, so if the elevator can't move, the trim then becomes a mini elevator – however it works in the wrong sense.

Trimming down would normally cause the trim tab to move up and this will lower the trailing edge of the elevator. That causes more lift from the tail plane which pitches the nose down.

But now, with the elevator jammed, trimming down will still move the trim tab up so the tab works like the elevator – it moves the tail down which raises the nose.

So if Bob had worked this out beforehand he could have flown the aircraft to quite a large extent, and possibly even landed at a sensible speed.

So I say again, understand the machinery. It can be life saving.

Would this have worked on an aircraft that uses springs or bungees to relieve stick pressures? Show your pupe different aircraft and discuss the trim systems on a Mooney and a Piper Cub and a Bonanza and a Cherokee. Remember, telling her doesn't do the job, you have to involve her. Be very sure that you understand the Cherokee and Comanche systems before you start explaining them. They are a bit tricky but extremely efficient.

Okay enough already about trim. Now let's have a look at flaps.

« Don't even hint that you haven't read 'Fate Is The Hunter.' It's mandatory pre-solo reading and then reading again every two years as a standard part of licence renewal. »

Strangely, the judicious use of flap can hoick you over an obstacle – or even stretch your glide.

Do you remember how Earnest Gann nearly flew a Liberator into the Taj Mahal? Don't even hint that you haven't read 'Fate Is The Hunter.' It's mandatory pre-solo reading and then reading again every two years. It's a standard part of license renewal.

Anyhow just in case you have forgotten, this story here are Gann's words:

While most airports in the world are surrounded by industrial junk, Agra is fantastically endowed. There is a border of dark green trees along the northern side, and just beyond the trees there is the Jumna River.

Almost on the shore of this river, stands a monument to love – the Taj Mahal. Its dome and delicate minarets are just visible beyond the trees, for the runway points at them straight as a cannon.

We have completed the pre-take-off check of the C-87 and are agreeably surprised to find all in order. It is unbearably hot, the true torch-heat of India, and I have duly considered it because no aeroplane wing exerts the proper amount of lift in hot air.

The very factor of flight will diminish in direct relation to the increase in temperature. Ahead the runway wriggles in the heat waves and appears foreshortened. Buzzards wheel against the blank and garish yellow sky and the only relief to our eyes is the black line of trees marking the northern limit of the field.

I will bear those trees in mind… Just over their tops there will be a layer of cooler air, which will be descending like an invisible waterfall. I will gain as much altitude as possible before reaching the trees, knowing some of it will be lost in passing.

I release the brakes and goad the C-87 down the runway at full throttle.

It is a ponderous, dream-like business at first, but this is always so… Such thoughts are fleeting because I already sense something is wrong. We are halfway down the runway and have only achieved sixty miles an hour. I glance quickly all around—the instruments, the engines, and the remainder of the runway.

What the hell is wrong now? Even this C-87 has never behaved in such a leisurely fashion.

Eighty miles an hour. We need one hundred and twenty and I should prefer one hundred and thirty. The trees dance towards us, wavering in the sun. Ninety. The choice is gone, other than a certain plunging through the trees. One hundred. I haul back tentatively on the elevator controls seeking response. Very mushy.

A glance at the engine-head temperatures and a quick resolve not to look again. With their task less than half done the engines are already far beyond their allowable heat… One hundred and ten at last. I can raise the nose wheel a little, but not yet enough. We just cannot clear those trees. But we must try… I haul back on the controls. The C-87 leaves the ground, sinks back, bounces on one wheel, then staggers aloft in a mushing half stall.

The trees are no longer there, but here. We clear them. I can count the leaves. A flock of buzzards explodes before us. We sink back towards the trees and are going to hit. The trees are a thin fringe along the river. Our tail is just past them as we sink below their tops. We are for an instant in the clear, over the river. Full power.

Air speed one hundred and thirty and still sinking.

Now, a new obstruction, dead ahead. The Taj Mahal. They are making repairs. Much of it is covered with scaffolding and I can see the workmen moving about. I can see the folds in their turbans. I can see their mouths open as we approach. I cannot see any beauty. The quickest and surest way to finalize a semi-stall in an airplane is to turn it.

But I must turn or they will have much more repair work to do on the Taj Mahal.

There is one crazy hope. It is not written in any book of aerodynamics.

“Franko! Full flaps!” He slams down the lever. The C-87 collides with a soft invisible wall. The air speed falls off and everything shudders. But we balloon upward a hundred feet almost instantly. Enough to barely clear the spike of the first minaret. “Now ease them up, slowly!” Franko complies and we sink again. But speed is returning. And I think we can clear the next minaret without turning. It flashes past. I see a group of workmen cringe against the scaffolding. The Taj Mahal is gone. We swoop down beyond it and with agonized slowness begin picking up enough speed for a halting climb. It had all taken less than twenty seconds. In that space of time I had grown much older. Say, in wear and tear, some several years.

The reason he nearly ruined the Temple of Love is that refuellers gave them twice as much fuel as they had asked for. And Gann didn’t notice. But his knowledge of aerodynamics saved them from a fiery death.

Full flaps can briefly give you enough lift to hoick you over nasties. They use your inertia to convert airspeed to lift. But after the flaps have done their rescue job, they leave you with an airspeed problem. You must have room to shove the nose down and gently bleed off the flaps.

Now imagine you are doing a forced landing and you can see you will be 50m short in your flapless condition.

Banging on full flap at the last second will stretch your glide, or hop you over the fence. Think about it – you were about to stall into the rocks at 70 mph. But full flap will delay the stall by 15 mph and allow you to fly the last bit: It’s an inertia thing – the heavier the aircraft the more effective it is.

If this is not clear in your mind then think about it until you can explain it to your pupe. Don’t ask another instructor, they probably don’t know. Go fly and try it on your own. I don’t want you to be just an instructor – I want you to be the best instructor you can be.

The Best Basics Book. Ever.
Perfect for RAAus Students.
Also Available:
JimDavis.com.au
Jim Davis, a passionate flight instructor with 15,000+ hours, is an author and regular contributor to Australian Flying magazine.

PilotTrain
Your Pilot Prep Centre
PilotTrain.com.au
Practice Exams for Pilots.
CPL Human Factors
Now Available

What Could Go Wrong?

Remember when you were 18, how you were fit, carefree and your health barely rated a thought? The least of your worries at that age is: will I pass my medical? **Michael Smith** shares what happened to his mentee.

I'm 56 now. Despite starting some lessons at a young age, I didn't get my licence until my mid 30s. I have enjoyed a couple thousand of hours flying over 20 or so years, with a few fun adventures here and there. Because we love aviation, when we meet a young person who shows an interest, we tend to encourage them. Like many of you, I've taken many a teenager for a fly after they've expressed an interest, to try and nurture that flame. We need pilots, and we like it when people want to join our clan.

One young lad, son of a close friend, whom I'd met at his christening and watched grow up, took a keen interest in flying. I happily mentored him. Many flights, some circuits, some journeys as well. He also sailed and seemed to have a natural flair for motion and understood the concepts. In a brief pause during plague, where we could fly but not leave the state of Victoria, we flew the outline of the whole state, because we could, for the love of it.

> **"A letter from CASA followed, with a list of tests to be conducted and a drug rehabilitation counselling requirement."**

A couple of airshows and open days later, our young mentee has become focussed at school in a way he never had before, his parents are amazed and pleased – with a goal in sight, he applies himself, knowing he needs certain marks to get into the aviation course he desires. I have recommended the RMIT course, because I think it's a first rate, vocationally focused education institution, and for me even more importantly, they fly out of Point Cook, Australia's oldest RAAF base, where I learned to fly and thus have a very soft spot for.

He gets in, and in early 2024, which a fresh new pilot's uniform, with shirts the whitest they will ever be, he starts the year with classroom lessons. As the year progresses, he moves into the fleet of shiny Cessnas with glass panels and starts learning the ropes. He's progressing well, with both study and flying.

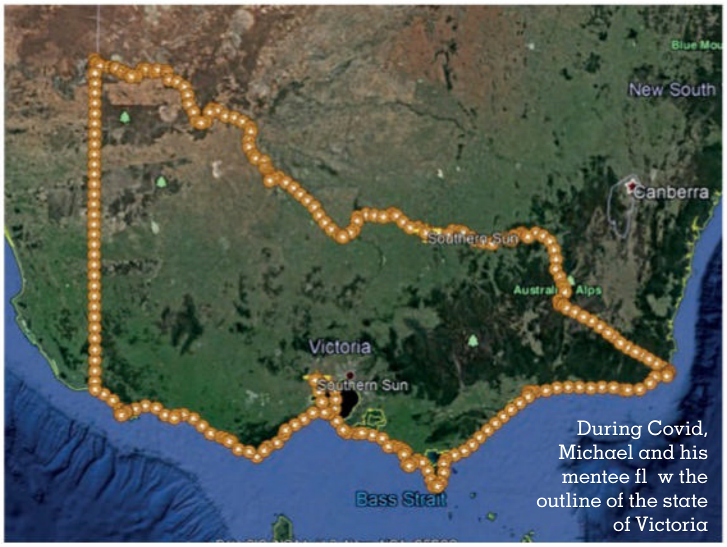
Suddenly, it's halfway through the year, there's talk of going solo: "I'd better do that medical thing. I'm young, fit and healthy, yeah, I'd better go do that," he says.

I recommended my DAME. I've been seeing her for years, and think she is wonderful. An appointment is set up. Physically, no problems, so looking good, but my mentee was raised in a good family and was always taught that honesty is the best policy. So, when asked one curly question he answered: yes, I did try marijuana a few years back but I didn't like it and haven't tried it since.

And that's when everything came to a grinding halt.

A letter from CASA followed, with a list of tests to be conducted and a drug rehabilitation counselling requirement. One of the tests, a hair follicle test, was submitted. He was then advised the lab has long wait times and it would take 5 months to get a result. That's a long time not flying, meaning the second semester falls apart and what was going so well has now fallen into depression, confusion and frustration.

We establish that the test can't be retaken with another lab, but after discussions and pleading, the result is finally received after 3 months. He tests negative for use, so his honesty was spot on and things are getting back on track. However, the course had to be extended by an extra 6 months to catch up on missed flying.

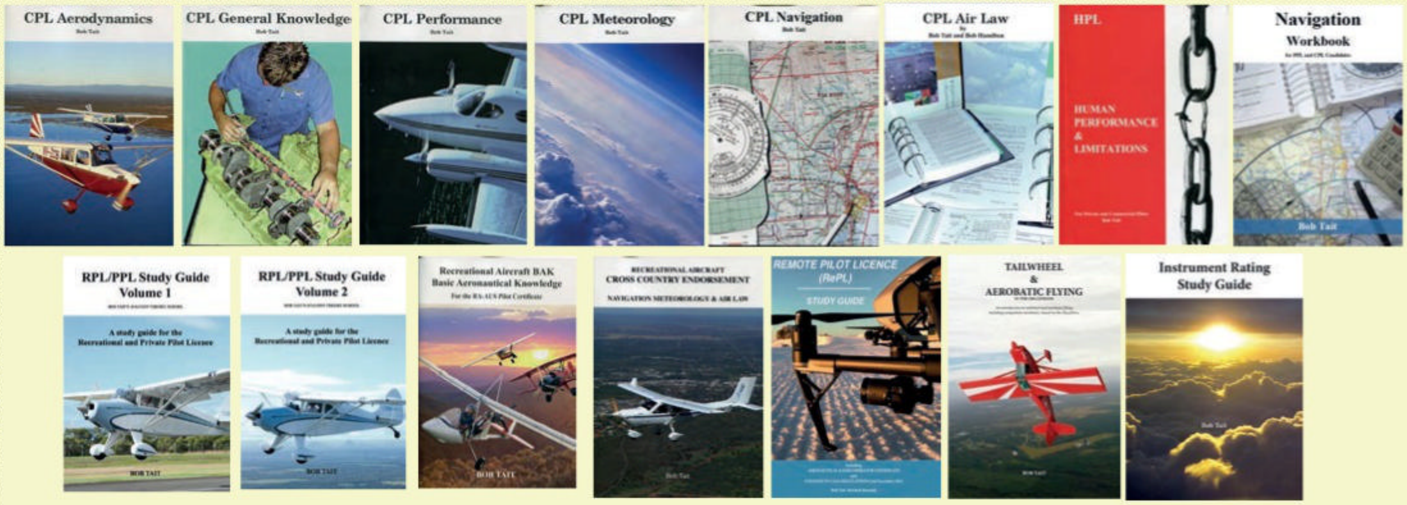

Blue Mou
New South
Canberra
Southern Sun
Australian Alps
Victoria
Southern Sun
Bass Strait

During Covid, Michael and his mentee flew the outline of the state of Victoria

IMAGE: MICHAEL SMITH

The lesson in all of this? Many of you would be thinking – don't be so honest! But no, the message is: as soon as you are accepted into your flying course, go and do your medical. There could have been any number of reasons that a medical wasn't able to be issued; some of them, hidden health defects that may prevent one from ever becoming a commercial or even private pilot. Don't leave it til it's time to go solo.

For the same reason that flight planning is important, preparation is awareness, get your medical sorted nice and early.


CPL Aerodynamics
CPL General Knowledge
CPL Performance
CPL Meteorology
CPL Navigation
CPL Air Law
HPL
HUMAN PERFORMANCE & LIMITATIONS
Navigation Workbook
RPL/PPL Study Guide Volume 1
RPL/PPL Study Guide Volume 2
Recreational Aircraft BAK Basic Aeronautical Knowledge
RECREATIONAL AIRCRAFT CROSS COUNTRY ENDORSEMENT NAVIGATION METEOROLOGY & AIR LAW
REMOTE PILOT LICENCE (RePL) STUDY GUIDE
TAILWHEEL & AEROBATIC FLYING
Instrument Rating Study Guide

BOB TAIT'S AVIATION THEORY SCHOOL
STUDY GUIDES, E-TEXTS AND PRACTICE EXAMS

Updated video lectures available for -
CPL Aerodynamics, General Knowledge, Meteorology, Navigation and Performance.
PPL Aerodynamics, General Knowledge, Meteorology, Navigation and Performance.
IREX full course.

www.bobtait.com.au bobtait@bobtait.com.au Phone: 0493 385 101

Rotors

***Benn Marks** brings us a special Avalon Airshow round up of rotary news.*

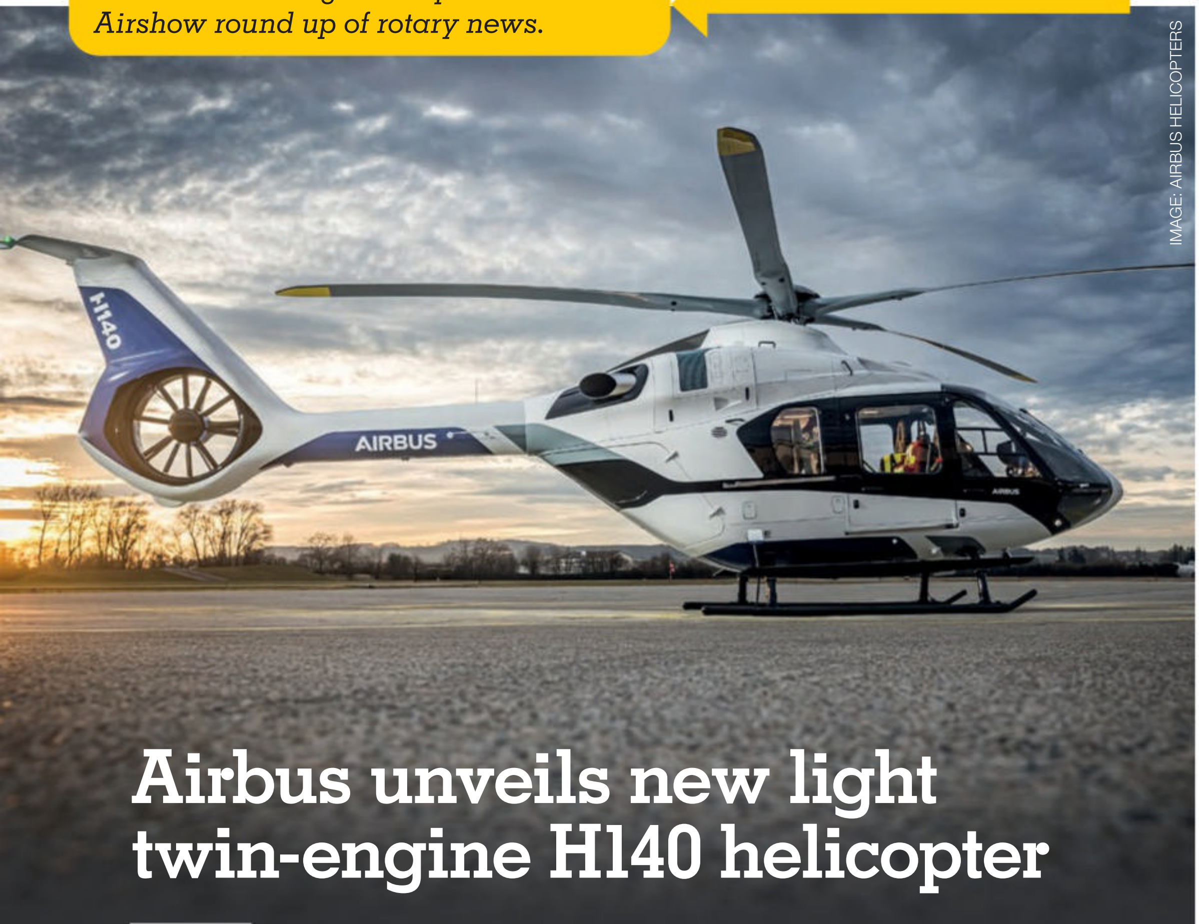


IMAGE: AIRBUS HELICOPTERS

Airbus unveils new light twin-engine H140 helicopter

Airbus Helicopters (AH) recently unveiled its latest rotorcraft design, the new light twin-engine, multi-mission H140. The H140 is a 3-tonne class helicopter that will complement AH's current light twin offering for the emergency medical services, passenger transport, and private and business aviation markets when it enters service.

Featuring a wide range of innovations, the H140 will have a new T-shaped tail boom with an optimised Fenestron that reduces sound levels, a five-blade bearingless main rotor, and two new Safran Arrius 2E 700shp turboshaft engines, each rated at 700shp. AH's new twin-engine helicopter will also feature a larger cabin space, large windows and optimised cabin layout that can accommodate up to six passengers comfortably, plus large clamshell doors. The H140's large clamshell doors and high tail boom will maximise its rear loading capabilities, allowing the use of different types of stretcher systems, including intensive care ones and transport incubators while its large sliding doors will facilitate access to the cabin.

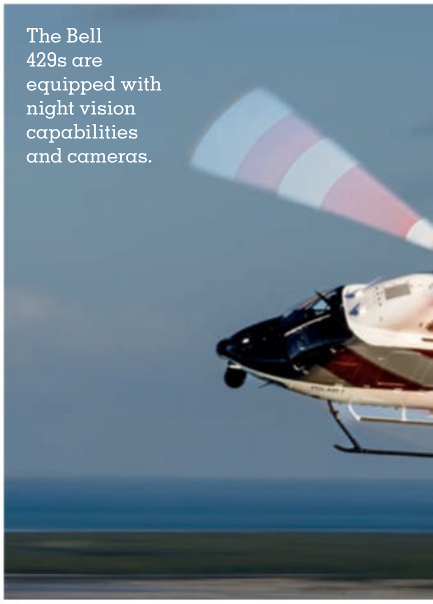
The H140 will also feature Helionix, AH's advanced avionics system that also equips the H135, H145, H160 and H175; it offers an innovative cockpit layout to enhance situational awareness, reducing the pilot workload and increasing the safety during the mission. The H140 is slated to enter service in 2028 for the emergency medical services segment.

ABOVE: The H140 will have a new T-shaped tail boom with an optimised Fenestron that reduces sound levels.

Queensland Police Service add three Bell 429s to fleet

Bell Textron Inc. recently announced that the Queensland Police Service (QPS) had entered into a second service provision contract for QPS POLAIR services for three additional Bell 429s. This will expand the number of Bell helicopters in its current fleet to six.

In 2022, contract provider Surf Life Saving Queensland (SLSQ) signed for three Bell 429s, operating the QPS POLAIR fleet responsible for patrolling and supporting on-ground policing efforts in southeast Queensland. The new batch of Bell 429s is part of a POLAIR service provision contract between QPS and Townsville based Meridian Helicopters to provide a similar airborne law enforcement capability in north Queensland for the next 10 years. Equipped with night vision capabilities and cameras, the Bell 429s will be configured with these essential



The Bell 429s are equipped with night vision capabilities and cameras.

this latest H125 addition is the 20th Airbus helicopter the company has ordered .

IMAGE: MICROFLITE AVIATION

features to assist QPS officers in tracking vehicles, apprehending offenders and locating missing persons from the air.

Microflite Aviation orders additional Airbus H125

Moorabbin Airport based Microflite Aviation recently announced it had ordered an additional Airbus H125 light single-engine helicopter to add to its extensive rotary-wing fleet.

Microflite Aviation, which is a leading helicopter and fixed-wing charter company, operates several Airbus helicopter models, with this latest H125 addition being the 20th Airbus helicopter the company has ordered over the years.

LifeFlight expands fleet with new AW139 helicopters

LifeFlight has announced a major fleet expansion with an order for four additional Leonardo AW139 helicopters to meet growing demand for its rotary wing services.

The four additional aircraft come as LifeFlight and joint-venture partner StarFlight Australia celebrate a decade-long collaboration with Leonardo Helicopters.

Since acquiring its first AW139 in 2015, this partnership has resulted in one of the largest fleets of AW139 helicopters in Australia. By 2027, LifeFlight and StarFlight's AW139 fleet will be among the largest in the country, with these new additions set to strengthen its Helicopter Emergency Medical Services (HEMS), search and rescue, law enforcement and aviation capabilities.

The additional aircraft will bring the total number of AW139s in LifeFlight and StarFlight's fleet to 20 by the end of 2027. The AW139s on order will be equipped with the latest avionics, advanced patient care capabilities, and enhanced search and rescue features.

Robinson Helicopter Company unveils new R88 helicopter

Robinson Helicopter Company (RHC) announced its first all-new aircraft in nearly 15 years, the R88. The R88 will be the largest and most capable aircraft the company has designed and will feature a highly configurable flat-floor cabin, with capacity for eight main cabin seats, two cockpit seats and a payload capacity of up to 1,800 pounds with full fuel.

Additional features of the new rotary-wing design will include a Garmin avionics suite, featuring large G500H TXi displays and GTN navigators with touchscreen controls. Power will be provided by a single 1,000shp Safran Arriel 2W turboshaft engine, with performance including a range of over 350nm and endurance exceeding 3.5 hours.

The R88 is expected to be available for customer deliveries towards the end of the decade.

POLAIR
VH-XP7
POLICE

IMAGE: KANA PHOTOGRAPHY AND SURF LIFE SAVING QUEENSLAND

LifeFlight and joint-venture partner StarFlight Australia celebrate a decade-long collaboration with Leonardo Helicopters.

LifeFlight
RESCUE

IMAGE: LIFEFLIGHT

Beyond Visual Reference

STORM FENECH

Storm Fenech is an RAAF fighter pilot, qualified flying instructor, aviation performance coach and Director/Mentor at BVR Performance. He is passionate about providing pilots the skills to perform at their best. storm@bvrperformance.com

IMAGE: STORM FENECH

The Art of Chair Flying

*From a Cessna 152 to an F/A-18, military pilot **Storm Fenech** details how to chair fly effectively.*

I had one hour until I had to lead a formation of four F/A-18F Super Hornets for an Offensive Counter-Air mission. Basically, the training mission involved transiting out to the airspace, air-to-air refuelling, fighting our way through hostile aircraft, conducting a strike onto pre-planned targets, bombing some targets of opportunity and then fighting our way back out. And all of this happened in less than 2 hours.

How could I possibly prepare for something so complex?

The answer is chair flying.

Chair flying is a technique where pilots visualise aspects of a flight prior to doing it. Being able to visualise the end goal, and the process used to achieve it, allows pilots to perform at higher levels throughout their flights. Imagine being able to see something 5-10 times before it happens; how much more effective would you be as a result?

And the good thing is, chair flying is applicable to all types of aircraft, pilots and flights. By employing the following techniques chair flying will allow pilots to handle unexpected situations more efficiently, as well as improve decision making skills in the aircraft. One other benefit is the time and money that can be saved during training and times of low currency; we all know flying isn't cheap.

Chair flying is about engaging all the senses and putting yourself in uncomfortable situations. Where will I be looking? What will I hear? Where will my hands be? How will I be feeling? Through visualisation and repetition, a pilot will build muscle memory and confidence, leading to fewer errors and better decision making. Chair flying is where you do the learning; the aircraft should be for consolidation.

So, how do I chair fly? Firstly, I make chair flying a priority, as this is the most important part of flight prep. This doesn't mean I do it first, I just ensure I set an alarm which provides me with enough time to chair fly at the end of my prep. The way I've chair flown throughout my career has been dependent on the type of flights I'm conducting and my experience on the aircraft type. How I chair flew when I was learning circuits on the PC-9 was different to how I chair flew when conducting missions on the F/A-18F.

Most of the pilots I've talked to will chair fly the perfect sequence on a CAVOK day with no traffic. But this isn't always going to be the case. There will be poor weather, there will be traffic and you will make mistakes. So why not chair fly with challenging weather and traffic? Why not chair fly the mistakes you're expecting to make? Chair flying is great technique to prepare yourself for the unexpected.

Pilots need to be chair flying the "what ifs". By "what ifs", I mean the parts of a flight that you don't expect to happen. And the reason is, because nothing ever goes to plan. Examples might be crosswind landings, additional traffic, restrictive weather on a NAV, in-flight emergencies or degraded instruments. This is what separates a high performing pilot from the rest.

Everyone has a different method of chair flying, so do whatever you feel is comfortable and most beneficial. Here's some of the techniques I'll teach my students to do whilst chair flying:

1. To build muscle memory, move your hands and feet at similar rates and sizes as you would in the aircraft.
2. If you're scanning do the same whilst chair flying, move eyes, move your head.
3. When you're manipulating switches, handles or rotarys put your hands where they'd be in the aircraft.
4. You can use props; a piece of PVC pipe is a great control column and tennis balls work well as rudder pedals.

As an instructor I conduct remediation after failed flights; most of the student pilots are chair flying the perfect sequence without errors. I've failed several flights in my career, and I owe it to these techniques for getting me into the seat of a Super Hornet.

P2010
GranLusso
A MASTERPIECE OF ITALIAN DESIGN
N221US
Design your perfect
Gran Lusso
TECNAM
QUALITY AIRCRAFT SINCE 1948

Sales and Admin
+61 7 5564 1951
www.tecnam.com

Regional Sales
Bruce Stark
b.stark@tecnam.com
M: +61 416 083 800

TECNAM PTY LTD
Official Tecnam Dealer Australia,
New Zealand and South Pacific

ROB WALKER

As the CEO of the RAAA, Rob Walker is an advocate for voice of regional Australian businesses. He is well known across the industry for his government experience with Airservices Australia and CASA.

What if you couldn't fly?

Regional Aviation Association of Australia CEO ***Rob Walker*** *says now is the time for a loud voice for aviation in Canberra.*

In Canberra there are more than 700 people officially working as lobbyists. It's a unique job that you can't really train for, which involves lots of meetings, coffee catch ups and discrete phone calls.

Ideas are put forward in policy papers, legislative and regulatory change is proposed and campaigns are conducted in traditional and social media. Pretty much every sector in the Australian community is active in some way in lobbying for their interests with federal politicians and bureaucrats.

Lobbying goes on all the time, but elections bring a heightened focus on policy making and of course political promises. In particular, the early weeks and months of a new government are a crucial period for decision making.

With the 2025 federal election behind us, now is the time to make sure the critical needs of the nation's aviation sector are not shuffled down the new government's priority list and real action is delivered. This means the rest of the year will be a busy time for the RAAA as we fulfil one of our strategic objectives on behalf of our members – advocacy. Lobbying is only one part of advocacy, but it is notably important at this point in the political cycle.

The RAAA put political parties and candidates clearly on notice before the 2025 federal election that urgent action to support regional and remote aviation is essential.

We published and distributed a detailed policy plan for the future that identified the essential role aviation plays in business and the community for the more than 2.6 million people who live in regional and remote areas. The plan highlighted the commitment regional aviation businesses have to serving their communities and the myriad of challenges they face. It then set out solutions to the current and long-term challenges and problems.

The plan asked political parties and candidates to think about what happens when rural and remote communities lose access to their air services. We posed the stark question: what if you couldn't fly?

Of course, with REX Airlines in administration, this is hardly a hypothetical question.

Our advocacy campaign is making sure politicians understand there is more to Australian aviation than the higher profile, larger airlines. Regular public transport and charter operators of various sizes play an essential role in regional and remote Australia. RAAA members with an air operators certificate jointly carry well in excess of 2 million passengers a year and move over 23 million kilograms of freight. Equally importantly, they employ more than 10,000 people.

A key point being made by the RAAA is that many people in aviation, quite probably the vast majority, feel governments largely take them for granted. Politicians can be slow to respond to issues unless there is a full-blown crisis and bureaucratic wheels turn at their own gradual speed.

Positive plan

Nevertheless, aviation has lots of positive people who are working hard to keep the industry thriving and growing, particularly in regional and remote Australia. What they need is the right policy and practical support to get the job done. Action rather than words.

The RAAA's policy plan sets out practical actions across areas such as economic support, skill shortages, removing regulatory burdens, better services from government aviation agencies, support for adopting new technologies and avoiding one-size-fits-all policies and requirements.

As a sector aviation is hardly unique in calling for a well thought out program of economic support where operations are critical to the nation. Regional and remote aviation services are of national significance because they enable other sectors, such as mining and agriculture, to flourish. Governments provide economic support for many other sectors because they have been recognised as playing a key role in economic and social development and aviation is no different.

The RAAA's policy plan calls for:

- government recognition that regional and remote aviation is an industry of national significance essential to communities and major business sectors
- a financial support package that provides long term certainty to regional and remote aviation businesses ready to invest in large ticket initiatives such as fleet renewal
- decisions on the best type of support package, including direct financial investment, loan underwriting, loan guarantees, concessional finance or grants
- examination of taxation incentives for operators to invest in aircraft fleet renewals.

The plan also focuses on the burdens regulations and government aviation agencies place on aviation businesses.

No matter whether you are flying for fun or business you know regulation can go beyond ensuring the highest possible safety standards. This is not a new issue and will probably never go away, yet it is vital to keep working hard to get improvements and to make sure political leaders are kept aware of the problem. We need to ensure there is pressure from above on the aviation agencies to do better.

At the same time, the government aviation agencies deliver required services to everyone involved in flying. We all at some point need a certificate, approval or service. When these are slow to be delivered or not provided at all, it is the people and businesses in aviation who suffer.

The RAAA's plan calls for:

- immediate federal government action to ensure aviation agencies have the right level of financial and human resources
- the re-balancing of staffing levels at CASA and Airservices Australia to ensure more jobs are allocated to the technical and operational people who deliver aviation services
- a commitment to not further increase charges for required government aviation services and action to ensure a disproportionate burden of charges does not fall on regional and remote operations
- action to make regulatory requirements less complex and onerous, with a particular focus on flight crew licensing and LAME licensing.

There is much more in the RAAA's plan for the future and you can read the full document on our web site. Right now we are getting on with the job of making sure our plan is not just words, but results in action that brings positive change, especially for regional and remote aviation.

ADVOCACY · COMMUNITY · LEADERSHIP · EDUCATION

RAAA
REGIONAL AVIATION ASSOCIATION OF AUSTRALIA

The RAAA represents aviation across Australia

Our members directly employ over **10,500 Australians,** many in regional areas.

On an annual basis, **RAAA members jointly turnover more than $1.5 billion**, carry well in excess of **2 million passengers** and move over **23 million kilograms of freight**.

Supporting the people and businesses of regional Australia

raaa.com.au

CARL BREWER Carl Brewer is an RAAus and GA instructor, based in Lilydale VIC

What makes a good instructor?

If flight training is an investment, choose wisely! What sort of things make an instructor a good one? Or more importantly, what makes them ones you need to give a very wide berth? ***Carl Brewer*** *shares his experience.*

As a student, you're going to spend a lot of time in a cosy little plane and in a classroom. You're spending a lot of hard earned to get whatever licence it is that you're pursuing. How do you get the best value?

Firstly, you have to look at why the instructor is instructing: the biggest red flag of them all is an hour builder. If your potential guide is more interested in logging hours than your progress, do not choose this instructor. How do you tell? You can look at how they manage their time, what they talk about, or you can just straight-out ask them why they're instructing. This is your due diligence. Listen to the answers carefully.

Experience is also a big one, although maybe not in the way you expect. An instructor with thousands of hours may well have thousands of hours of nonsense or be so "old school" that the mere sight of an ADS-B box in a plane sets them off on a rant. Perish the thought that they might teach you how to use your new-fangled EFB!

The opposite also applies. An instructor straight out of "instructing school", has very little actual knowledge about how to teach, and how to work through sticking points, and to the detriment of trainee pilots in the most vulnerable phase of their training, the very first few lessons.

And yet, flying schools toss the freshies to the newbies; the blind leading the blind in a lot of cases. But sometimes, a brand new instructor is genuinely great; they may have a passion for teaching, be widely read and have experience outside of aviation. Sports coaches, high school teachers, those sorts of people bring life skills to the table that a kid straight out of school, then jamming a CPL and then a couple of months cramming to pass the PMI exam and learning to regurgitate patter in an artificial training simulation, probably does not have. Ask them what experience they have. See if they go off-campus and explore some rabbit holes. This is good.

A sound knowledge of flying theory is going to make a lot of difference too. If you want a great filter, ask them how a wing makes lift. If they start talking about Bernoulli's equations and a bit of bunk called the "equal transit time" theory, they don't know how a wing works. If they use it as an opportunity to explain that there's a number of published explanations, some of which are demonstrably false, then you're probably onto a good thing. You don't actually need to know what it is that accelerates your aircraft up against gravity, but your instructor should. It's a minefield, see how they navigate it. If they

> « If your potential guide is more interested in logging hours than your progress, do not choose this instructor. »

insert the phrase, "all this is a simplification, but it's a good way to get the basics across", that's a good sign. Ask them how they know. If they just point at the one textbook on the desk, that's not a good sign.

There's also intangibles, like patience and a sense of humour, which are so context-sensitive that you can't really tell until you've spent some time with the potential instructor. There's knowing their strengths and their weaknesses. Ask them what they're not good at, and how they manage it when they're stumped.

Then there's appearance. They don't need to have a million gold bars on their shoulders and be dressed like the captain of the Love Boat, but they do need to be neat and well presented and organised. This is a sign of professionalism. Professionalism that carries through to making sure they have all your records put into some flight school management system, not scattered around and lost.

This may seem like a lot of work to do before you start flying. Consider though, that you may well spend upwards of $100,000 or more on flight training if you're looking at getting a CPL. Arguably more important than the money, is the time you will spend. A good instructor will save you a fortune in time and money, and make your flying enjoyable even in the bits you struggle with. This is worth investing your time in before you commit to spending all that time.

Then there's the school itself. This is a whole vast issue that needs much more than one page. One thing to always look at, if the school insists on you paying for everything up front: read the fine print very, very carefully. What happens if you take longer than expected to complete some aspect of your training? What happens if you're one of the many who get blocked by the RPL(A) exam? How does the school manage this?

There's a long, shameful history in our industry of grifters and charlatans running flying schools, it behoves you to be careful and take your time picking the right one that will work for you.

Your Safety is in Your Hands

Safe flying is a cause all good aviators support and a cornerstone of the national pilot safety campaign CASA launched in 2022. **Pip Spence** *explains.*

It was gratifying to see a strong response to the national pilot safety campaign, Your safety is in your hands, and data showing it not only resonates with the pilot community but it is helping many.

Independent campaign tracking available at the time of writing showed that more than 83% of pilots recognised the campaign and more than two thirds took some action. A breakdown showed that 36% of those who saw the campaign spoke with other pilots about aviation safety, while 27% adopted safer flying practices, and more than half (58%) reported they learnt something new from the campaign.

This reflects what we've learned from listening to pilots: gaining new insights, co-designing solutions and adapting where we needed to address emerging safety issues while supporting different learning styles.

Experienced pilots know that upgrading skills and knowledge is a never-ending pursuit that benefits everyone and could one day save your life.

From the start, we wanted to emphasise the need for all of us to work together to improve safety and this was why we collaborated with other agencies and industry bodies. We wanted to give pilots useful information from trusted sources so they could make informed decisions. We also wanted to empower every pilot to take personal responsibility; it is this which underpins the campaign.

Following in the shoes of our New Zealand and Singapore Civil Aviation Authority colleagues, we've introduced a new voluntary way to demonstrate your commitment to aviation safety: something we are calling the aviation safety pledge.

We understand this may not resonate with everyone. However, our focus is on promoting practical actions that collectively reduce risk, strengthen safety culture, and encourage best practices across the industry.

It's built on research and evidence that show when you make a public commitment, you are more likely to follow through on it.

There are two different pledges: one for pilots and one for organisations. For pilots, it's about encouraging personal responsibility, encouraging safe flying habits and continuous learning.

We plan to publish a list of those who take the pledge on our website, and participants can also receive a digital badge. The badges, similar to those from our AvSafety webinar series, recognise pilots who invest in ongoing learning and development. Pilots have told us they value recognition from CASA and see the badges as a way to demonstrate their commitment to safety. Many also find them motivating and have said earning a badge encouraged them to pursue further professional development and wanted to see the initiative expanded. This is one way we're able to enhance that program.

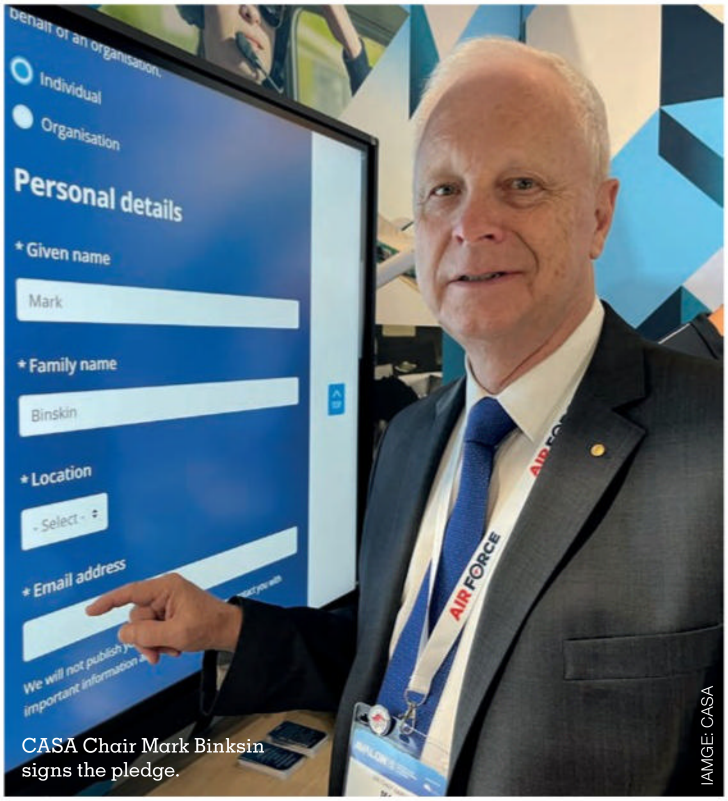
And, of course, we'll continue to provide free CASA resources.

Our pilot safety hub, which can be accessed from our website at www.casa.gov.au, features videos, podcasts, quizzes, crash comics and audio close calls as well resources from our international aviation authorities such as the European Union Aviation Safety Agency

These are backed up by safety seminars and webinars, safety cards, posters and informative guides from our store.

The free AvSafety webinars are tailored to a range of safety topics and suitable for pilots of all experience levels. Eight out of 10 pilots said they find the webinars useful, 87% agreed the content was relevant to their flying practices and 72% learned something new. They also overwhelmingly agreed the event speakers were high-quality and knowledgeable.

> « Experienced pilots know that upgrading skills and knowledge is a never-ending pursuit that benefits everyone and could one day save your life. »



CASA Chair Mark Binksin signs the pledge.

IAMGE: CASA

Publications include our Plain English Guides, our popular Visual Flight Rules (VFR) Guide and our Stay on Track series of booklets designed to help VFR pilots become familiar with the Brisbane, Perth, Darwin, Gold Coast, Melbourne and Adelaide regions.

Finally, you may have read some of the media stories arising from a spate of fatal light aircraft accidents last year. All accidents are a tragedy but contrary to some media commentary, our analysis of accidents shows that both the number of fatalities and the fatal accident rate have trended down slightly over overt the past decade.

This does not mean we should be complacent and more needs to be done to avoid fatalities. Safety, like liberty, requires eternal vigilance so please continue to actively engage with our safety education initiatives, for your safety and that of others.

All the best,

Pip

AEROPRAKT-32

LILYDALE FLYING SCHOOL
YARRA VALLEY AVIATION

MAKE LEARNING TO FLY A BREEZE

Learning to fly can be a daunting task, but at Lilydale Flying School you're among friends. We have offered individualised flight training for aspiring and accomplished pilots for over 50 years. For recreational and commercial flight training in a friendly environment, contact us today.

(03) 9739 1211 | info@yvaviation.com.au
13 MacIntyre Lane, Yering VIC | yarravalleyaviation.com.au

Wrap up from Avalon

Jessica Graham brings us a wrap up from the Avalon Airshow.

New Partnerships for the ABAA

On the eve of the show, the ABAA began with a record attendance at its meeting and networking event, and the week continued strongly for its professional business aviation community, many of whom had travelled from interstate or overseas to attend.

By the end of the week, the association was pleased to announce new partnerships with Airbus Corporate Jets and FL3XX, both of whom demonstrated their support of the Australian business jet sector as new ABAA Industry Members.

In Melbourne for the show, the Airbus Corporate Jets team profiled the features of their ACJ TwoTwenty at an intimate mid-week event. The aircraft was showcased as offering ultimate comfort and state-of-the-art technology without compromising range and economics, and guests were invited to "reimagine their place in the sky".

Austrian-based complete aviation management solutions provider FL3XX is investing significant resources as it expands into the Australian market. CEO and founder Paolo Sommariva took the opportunity to connect with various business jet operators and understand their many regulatory and compliance challenges.

Bombardier Defence Announcement

During the show, Bombardier Defense announced the order of two of its Challenger 650 aircraft destined for intelligence, surveillance and reconnaissance missions in Australia.

Bombardier and Principle Finance, both members of the

Falcon 900LX

G700
N706GD

IMAGE: KAITLYN COSTA

G700 made a striking impression amid the static display.

IMAGE: BOMBADIER

The purchase increases the company's presence in Australia and the Asia-Pacific region.

Australian Business Aviation Association, signed the deal, which will further expand Bombardier's already substantial footprint in the region.

Said Jean-Christophe Gallagher, Executive Vice President, Aircraft Sales & Bombardier Defense, "This purchase represents a major milestone for Bombardier Defense, increasing our presence in Australia and the Asia-Pacific region. Our aircraft are the platform of choice not only due to their reach, persistence and performance, but also due to the large accessibility of our services and support ecosystem in the country".

The deal coincided with the company's announcement that it will expand its MRO capacity in Perth, extending its coverage for WA-based and visiting Bombardier operators.

The application of these aircraft in a defence capacity demonstrates the flexibility and utility of modern business jets, a theme further emphasised by several special mission configuration aircraft on display at the show.

Gulfstream a Striking Presence at the Show

As G700 deliveries continue to build momentum, Gulfstream used the event to strengthen relationships with existing and potential partners in Australia and the Asia-Pacific region.

With a scaled-back presence, the company took a more strategic and bespoke approach than in previous years, but its G700 made a striking impression amid the static display.

With a range of up to 7,500 nautical miles at Mach 0.85 and 65 city-pair speed records under its belt, the aircraft continues to gain popularity in the region.

Sustainability and Emerging Technologies

Again this year, prominent themes included the drive towards sustainable aviation fuels and the integration of emerging technologies within the sector. OEM exhibitors Gulfstream, Dassault, Textron and Embraer all highlighted the capabilities of their respective fleets in terms of sustainable aviation fuel and the seminar on Australia's sovereign SAF capacity was widely-attended.

Alongside this, eVTOL and UAM displays challenged traditional thinking within the business jet sector. Exhibitors such as Australian-based AMSL Aero showcased their electric motor-powered Vertiia aircraft, designed to carry up to four passengers and have a range of up to 250km on a single charge. Best suited to urban mobility and short-range regional air transport, these aircraft stand to present complementary solutions for the business jet owners of the future.

PRESENTED BY
MUDGEE AERO CLUB & PAUL BENNET AIRSHOWS
SUN APRIL 27
WINGS
MUDGEE
WHEELS
& WINE
PAUL BENNET AIRSHOWS
Warbirds
Aerobatics
Car Displays
Wine & Beer
Street Food
Amusement Rides
SCAN ME!
TICKETS ONLINE AT
WINGSWHEELSANDWINE.COM.AU

What can we learn?

JIM DAVIS

Jim Davis has 15,000 hours of immensely varied flying experience, including 10,000 hours civil and military flying instruction. He is an established author, his current projects being an instructors' manual and a collection of Air Accident analyses, called 'Choose not to Crash'.

Lean Right, Live Longer: The Skill That Saves Lives

This discussion is to promote safety and not to establish liability. CAA's report contains padding and repetition, so in the interest of clarity, *Jim Davis* has paraphrased extensively.

BACKGROUND INFORMATION

The accident aircraft had been damaged on a previous forced landing in July 2023. The wings were removed before it was transported via road to the maintenance facility. The left wing was reinstalled and a repaired replacement right wing was fitted.

HISTORY OF THE FLIGHT

On 28 August 2023, at Claresholm Industrial Aerodrome (60 nm S of Calgary) Canada, [after the rebuild] the aircraft was conditionally released by the AMO pending a satisfactory test flight for straight and level flight. The pilot would then provide the final signature to release the aircraft back into service.

At about 1600, during her preflight inspection, the pilot noticed a leak on the right fuel tank. The tanks were then filled to maximum capacity to troubleshoot the leak. After the leak was rectified, the aircraft was again conditionally released for the test flight.

The pilot occupied the right seat, which was the seat that she normally used when conducting aerial photography. After the run-up, the pilot taxied into position on runway 03 and commenced the takeoff at 1928.

The aircraft was observed getting airborne in the first third of the runway (about a 1000-foot take-off roll) and commencing a shallow climb on the runway track. At about 1 nautical mile from the aerodrome, several eyewitnesses described the aircraft in a shallow climb and then turning sharply to the left before entering a steep turning descent.

The aircraft impacted the ground 5200 feet from the departure end of runway 03 and 215 feet left of the extended centreline. The pilot received fatal injuries. The aircraft was substantially damaged. There was no post-impact fire.

AIRCRAFT INFORMATION

Ground scars were consistent with the aircraft contacting the ground in a spin to the left. The flaps were in the up position, the elevator trim was in the take-off position, the throttle control was set to full power, and the mixture control was set to full rich. Damage to the propeller was consistent with power being produced at impact.

The aircraft had long-range tanks with a total capacity of 37.5 US gallons.

The aircraft was equipped with a digital engine monitor which recorded an increase in fuel flow at 1928:20. That stabilized at about 8 U.S. gallons per hour, which is consistent with take-off power. The recording ceased 93 seconds later.

During that time the fuel flow and engine temperatures were consistent with the engine producing power and were similar to previous flights recorded by the monitor.

All aircraft components were located in close proximity, including both wings and vertical and horizontal stabiliizers. The continuity of the flight control system was verified. The pitot system, stall warning system, and engine were examined. No anomalies were found.

The seat position was appropriate for the pilot to be able to reach the flight controls.

The aircraft C of G was within the envelope and it weighed 1543 pounds at takeoff. This is 127 pounds below its maximum gross weight.

The investigation did not discover anything that could have led to the stall and spin.

WEATHER INFORMATION

30 minutes before the accident, a nearby station reported:

- Temperature 29.5 °C
- Dew point 3.8 °C
- Wind 120° (T) at 15 km/h

AIRCRAFT PERFORMANCE

The density altitude was 5347 feet ASL at the time of the accident. The POH advises that to achieve maximum engine rpm, the mixture control should be leaned anytime that operations are conducted above 3000 feet ASL.

The combination of high temperature and high elevation can drastically reduce the performance of the airplane in the following ways:

1. the engine power is decreased because its fuel/air mixture is reduced
2. the propeller develops less thrust in thin air
3. the wings develop less lift in thin air.

As a result, the take-off performance is substantially reduced.

According to the POH, with the aircraft at its maximum take-off weight, flaps up, mixture leaned for maximum engine rpm, and for the density altitude at the time of the occurrence, a maximum rate of climb of 475 fpm can be achieved at 65 knots IAS.

Based on available information the average ground speed from the application of take-off power to the spin entry was 53 knots. Applying the wind and prevailing conditions gives a 50-knot average CAS (46 knot IAS). The stall speed when the aircraft is at its maximum take-off weight, with flaps up, and wings level is 48-knots CAS.

SPINS

Entry into a spin can occur at practically any airspeed, as long as there is sufficient yaw while the aircraft is stalled. For spin recovery the POH calls for:

Ailerons: neutral
Throttle: idle
Rudder: full opposite to rotation
Elevator: forward until rotation stops
Rudder: neutral
Elevator: ease out of the dive.

Note: allow at least 1000' for a 1-turn spin and recovery.

PILOT EXPERIENCE

This was the pilot's first summer with the company. When she

Aiming to make safer pilots of us, here veteran instructor Jim Davis looks at extracts from official CAA Accident Reports from his homeland of South Africa and analyses why things went wrong and how we may all avoid making similar mistakes.

was hired in June 2023, she held a valid Category 1 medical certificate, a commercial pilot licence – aeroplane, a multiengine rating, and a Group 1 instrument rating, and she had accumulated 256 hours of flight time.

She then acquired 135 hours with the company. At the time of the occurrence, her total flight time was 391 hours, mainly on the Cessna 150/152 aircraft. Her commercial pilot licence was valid.

The pilot had not flown in the 31 days before the accident because the aircraft was being repaired.

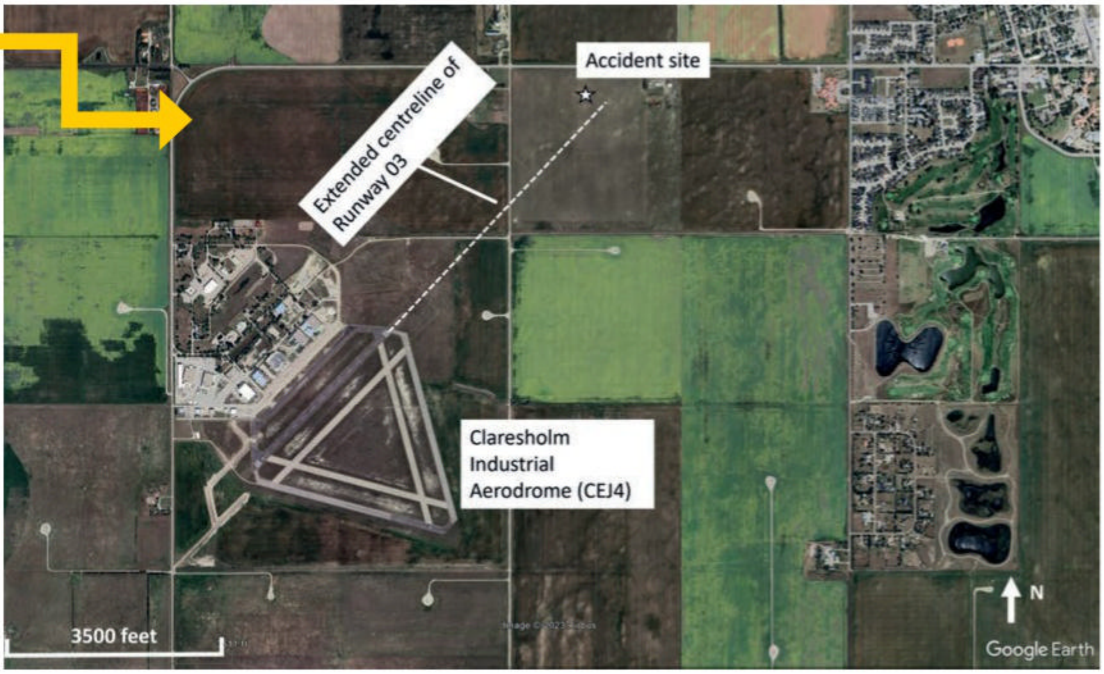

Accident site
Extended centreline of Runway 03
Claresholm Industrial Aerodrome (CEJ4)
3500 feet
N
Google Earth

IMAGE: TSB CANADA

ABOVE: The aircraft impacted the ground 5200 feet from the departure end of runway 03 and 215 feet left of the extended centreline.

Jim's comments

What a pleasure it is to read a well-written accident report. A few things jump out at me as I read this. I find the first very worrying.

Rebuilt aircraft

Some years ago I did a test flight on a C150 that had suffered damage to the right wing. The wing had been rebuilt by Ian Ritchie in Port Elizabeth.

The aircraft flew fine when straight and level but when I stalled her in various configurations, she flung the right wing down violently. Ian was much amazed by this. He pulled out his measuring equipment and we both went through the figures for angle of incidence, washout and dihedral very carefully.

He made a couple of small adjustments and I tested it again with identical results. He then got the chief Cessna engineer to fly down from Comair headquarters in Johannesburg.

There was more measuring, adjusting and consulting with the factory in the USA. Nothing changed. Eventually everyone threw their hands in the air and gave up. A new wing was flown out from America and she flew perfectly. The rebuilt wing was retired in a mixture of puzzlement and disgrace to lean against the back wall of the hangar where it made a splendid home for generations of rats.

I have heard similar stories of apparently serviceable Cessna wings causing grief. It seems that despite appearances they are not all equal. You have possibly flown one-series Cessnas that prefer to drop a particular wing on the stall. Or ones that don't want to spin in a certain direction.

It seems the rigging of those wings can be critical compared to Cherokees which are totally predictable on the stall.

Which brings us back to this accident. The fairly inexperienced commercial pilot was simply told to fly the aircraft and test it for "… straight and level flight."

That's really not good enough. A far more experienced pilot should have taken that aircraft up to 3000' and tested its behaviour at the stall in all configurations.

Unfortunately we will never know whether the accident was caused by a potentially twitchy aircraft.

Having said it was a good report, they then give the wind in km/hr relative to true north. So I had to untangle that to work out that she had an 8kt, 70° crosswind from the right. Is this why the crash site was 215' left of centreline, or had she fallen into the trap of not using enough right rudder during takeoff and climb?

Now we come to more serious stuff. She had a density altitude of 5347' but the mixture was fully rich leaving her well short of power. It seems this was the first time she had ever experienced summer temperatures for this operation.

Finally, and worst of all, she seems to have been flying at and indicated airspeed of 46 kts (if the report has untangled it's GS and CAS IAS figures correctly). That means she was on the edge of a stall, and close to 20 kts too slow.

The POH calls for an IAS of 65 knots, and says she should have had a rate of climb of 475 ft/min.

I believe that if she had leaned out correctly and climbed at 65 knots there would not have been an accident. So was the crash due to poor training, poor flying or poor rigging on the aircraft?

Sadly we will never know. But we can still learn from this unfortunate girl's death.

What can we learn?

- Don't be a test pilot if it's not your job.
- Correct leaning is a live-longer skill.
- Density altitude is a killer.
- Always use POH speeds.

A Message Received

***Steve Hitchen** believes the Bankstown Corridor issue shows that CASA's consultation regime is working better than it ever has*

Perhaps the most volatile flashpoint between the general aviation community and the CASA over the last 20 years has been consultation and its evil twin brother, lack of consultation. From the faux consultation around removing GAAP procedures at metro GA airports to most of CASR Part 61 and the bewildering new fuel rules, regulator and regulated have clashed more than they have gelled.

In February this year, in an event rarer than a solar eclipse, consultation feedback managed to get a proposal torpedoed completely. The GA community shredded the Bankstown Corridor concept to such an extent that CASA has had to go hunting for a clean-sheet solution.

Although many GA advocates are seeing this as a failure ("why did they ever think this would work?"), it can just as easily be considered a crowning moment ... for consultation.

But it must be said that the catalyst for all this, Western Sydney International (WSI), could justifiably be declared the greatest failure of consultation in aviation history. Yes, the community was consulted and they couldn't have sounded klaxons any louder than they did. This was predicted, but the warnings were pushed aside by a bow wave of expediency.

The tidal wave behind WSI has swamped GA in the Sydney basin, putting Bankstown's training industry in a sink-or-swim situation. Finding a pipeline to a practical training area has proven complex for both the GA community and CASA's Office of Airspace Regulation (OAR).

OAR's first attempt, the Bankstown Corridor, was universally unloved; the concept now consigned to a box marked "In the Event of Fire, Throw this on". It was, I suspect, not simply the *best* idea they had, but maybe the *only* idea they had.

Consultation in this case proved more effective than it ever has before. That can be attributed to CASA's consultation methods being strengthened in the past 10 years. Since 2016, CASA has:

- established a Stakeholder Engagement division
- set up the Consultation Hub
- established the Aviation Safety Advisory Panel (ASAP)
- created technical working groups with GA community experts.

Additionally, CASA is beholden to the Department of Prime Minister and Cabinet's Office of Impact Analysis, which has some very stringent guidelines about how to consult and what to do with the feedback.

It's a robust system that gives everyone in general aviation the chance to have their say. But, it's not a cure for all illnesses, nor is it a silver bullet, or any other cliche you wish to apply. Consultation can't overcome the wishes of higher powers who rule for the people, not for the aviators.

In the mid 1990s, the Federal Government broke CASA away from what was then the Civil Aviation Authority over fears that the aviation community had "captured" the regulator; the CAA was too close to the industry and inclined too much in their direction. The machine they created went entirely the other way and imposed regulation without genuinely regarding the needs of the industry. It did, however, comply well with the unwritten directive to keep aviation out of the headlines.

So now CASA walks a very narrow channel between "consult" and "capture", and staying on that path is the reason why many of things the GA community wants, it doesn't necessarily get.

When it came to the Bankstown Corridor, the GA community got everything it was after, which showed that the consultation system we have now works as well as it ever has, provided the feedback is accurate and focused.

Soon, the OAR will be releasing another proposal to connect Bankstown to a new training area, and you can bet they will once again turn to the GA community for genuine feedback.

It's a crying shame a blinkered department didn't value GA's feedback when the WSA project kicked off.

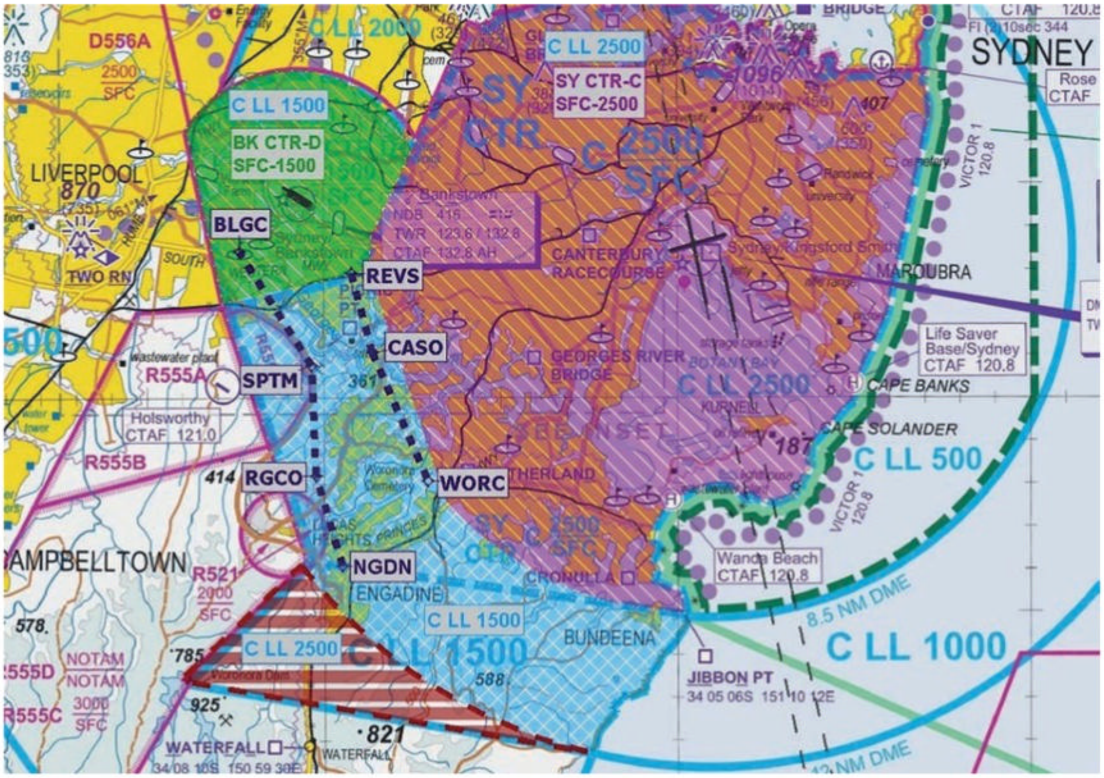

D556A
C LL 2000
C LL 2500
SY CTR-C
SFC-2500
SY CTR
C 2500 SFC
C LL 1500
BK CTR-D
SFC-1500
LIVERPOOL
870
BLGC
REVS
CASO
SPTM
R555A
R555B
Holsworthy CTAF 121.0
RGCO
WORC
NGDN
ENGADINE
AMPBELLTOWN
R521 2000 SFC
C LL 1500
C LL 2500
R555C 3000 SFC
NOTAM
WATERFALL
BUNDEENA
CRONULLA
CANTERBURY RACECOURSE
GEORGES RIVER
BOTANY BAY
KURNELL
C LL 2500
MAROUBRA
SYDNEY
Rose CTAF
VICTOR 1 120.8
Life Saver Base/Sydney CTAF 120.8
CAPE BANKS
CAPE SOLANDER
C LL 500
Wanda Beach CTAF 120.8
8.5 NM DME
C LL 1000
JIBBON PT
34 05 06S 151 10 12E
12 NM DME

IMAGE: CASA/AIRSERVICES AUSTRALIA

ABOVE: Bankstown Corridor] Consultation killed the Bankstown Corridor concept proposed by the Office of Airspace Regulation.

ROTAX®
UNITED BY PASSION.
FLYROTAX.COM

BERTFLOODIMPORTS | (03) 9735 5655
ADMIN@BERTFLOODIMPORTS.COM.AU
BERTFLOODIMPORTS.COM.AU/

BERT FLOOD IMPORTS

**AUTHORISED
ROTAX
DISTRIBUTOR**

The DC ONE-X doesn't just invite comparison.

It demands it.

Think of it as climate control for your cockpit.
Outlast
Not too hot, not too cold.™

A head pad that keeps you cool? No sweat.

Utilizes Outlast® technology Micro-encapsulated Phase Change Materials (PCMs), which absorb excess heat from the top of the head when it gets too warm, then releases that heat back should the temperature cool down.

Clamping pressure? What clamping pressure?

Unique stirrup design with swivel hinge allows movement side-to-side and in-and-out to disperse clamping pressure evenly for a personalized, comfortable fit.

David Clark
Model M-5B

Crisp, clear communication? Roger that.

Advanced M-5B electret, noise-cancelling microphone ensures clear communication and voice transmission with ATC. Sporty's Pilot Shop calls this mic *"Second to None"* for clarity.

The DC ONE-X is designed with features not found on other premium ANR headsets. Its lightweight (just 12.3 ounces), yet rugged alloy suspension system provides a unique combination of comfort and durability. Excellent Hybrid ANR performance ensures quiet, fatigue-free flights. And its price (under $1,000), makes the DC ONE-X the best value, premium ANR headset in aviation.

For more information and to find your nearest dealer, visit **www.davidclark.com.**

David Clark

WWW.DAVIDCLARK.COM

An Employee Owned American Company

© 2025 David Clark Company Incorporated
® Green headset domes are a David Clark registered trademark.